

**ADVANCES IN
SOCIAL SCIENCES
RESEARCH JOURNAL**

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Thematic Progression of Higher Education Advertorials: A Case Study in English and Bahasa Indonesia

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ABSTRACT

Many researchers do their research on advertorial but the one discussing thematic progression in advertorial is still limited. The word advertorial comes from two English words; they are *advertisement* and *editorial* as an English blending words. This research data focuses on higher education both in English and Bahasa Indonesia advertorials. This article tries to figure out the types of the thematic progression and the types of the theme in advertorial for higher education both in English and Bahasa Indonesia advertorials. The research method applied in this research is descriptive analysis. The data taken from advertorial both in English and Bahasa Indonesia are collected and they are analyzed based on the Halliday's theory of thematic progression and the types of the each theme found in the data. The research discusses two main questions; firstly what type of thematic progression found in Bahasa Indonesia and English advertorials for higher education, and secondly what types of theme found in each theme in English and Bahasa Indonesia for higher education advertorial. After doing classification and analyzing the data, it is found that the thematic progression in English and Bahasa Indonesia advertorials has different pattern. The dominant thematic progression found in Bahasa Indonesia advertorial for higher education is zigzag theme pattern while the dominant one found in English advertorial for higher education is reiteration theme pattern. From the data found, both of Bahasa Indonesia or English advertorial, it is found that the dominant theme found in each clause of the data is ideational or topical theme.

Keywords: thematic progression, advertorial, zigzag pattern, reiteration pattern, ideational theme, topical theme

INTRODUCTION

In their development, research on linguistics do not always stand alone in their theoretical area but have interacted with other disciplines, known as macro or applied linguistics. In such a kind of study, linguistics could be interacted with education, tourism, information technology, teaching, health sciences etc. In health sciences, for example, Pamungkas & Abdulah (2017) study the linguistics-based product naming methods of some over the counter (OTC) medicines in Indonesia and their impacts to companies and consumers.

Furthermore, (Pamungkas et al. 2018) also tries to interact linguistics with information technology by identifying psychological subjects in News Headlines of Universities' Website in Indonesia. Since this study has similarity on Systemic Functional Linguistics (SFL), this study is a preliminary research which discusses the thematic progressions in Bahasa Indonesia advertorial and English advertorial employing the SFL crossed with communication studies. As

everybody knows that the role of the English language in globalization and the impact of globalization on English are complex issues which require close scrutiny (Sharifian 2016).

The word advertorial, in the field of communication, comes from the two words; advertisement and editorial. By understanding the thematic progression applied in the advertorial, the readers will learn the writers' style in communicating their ideas both in Bahasa Indonesia and English advertorial for higher education to the readers. Communication, as Levine and Edelman (1993) in Mulyana (2012) is the process of sharing through verbal and nonverbal behavior. From the definition, it is understood that advertorial as a verb language is a part of communication. In communicating, the speakers or the writers are influenced by their own culture as mentioned by Condon and Yousef (1985) in Mulyana (2012),

"Communication involves expectation, perception, choice, action, and interpretation. Every time you communicate with someone, there is no doubt that he or she comes from a cultural environment. This means that what he or she says and the way he or she behaves is influenced by his or her culture, although this doesn't mean that all members of the culture behave in exactly the same way."

This research tries to describe the culture of the two different nations, English and Indonesian; their own ways in communicating their culture through the advertorial.

The word advertorial, in English, comes from the two English words; advertisement and editorial. It is found in the Merriam Webster that advertorial is "an advertisement that imitates editorial format", and this word has been one of the English vocabularies since 1946. In *Kamus Besar Bahasa Indonesia* (2003) as a dictionary of Bahasa Indonesia the word advertorial is defined as "*iklan yang merupakan berita (bukan gambar atau poster)*". The definition means that the word advertorial in Bahasa Indonesia is a news as a promotion (neither a picture nor a poster). In other way, advertorial is a promotion text which is a journalism form to introduce or to promote products or services to the readers in mass media. So the advertorial is one of the communication tools between writers and readers.

Relating to the types of advertorial (Iriantara & Surachman, 2011, p. 128-129), the advertorial could be different from products, services, corporate, and government. The advertorial of products as the first type, introduce the types of products to the readers. Secondly, the advertorial of services offer the kind of services to the readers. Thirdly, the advertorial of corporate discusses the existence and the activities of the cooperation or the institution while, the advertorial of the government contains of the activities of the government or the potency of one area.

In this preliminary research, the writers discuss the second type of advertorial since the higher education advertorial is one of the advertorial of services. The advertorial of higher education mentioned are both in English and Bahasa Indonesia languages.

Advertorial

Today, advertorials is as commonly referred by magazine advertising supplements (Stout et al. 1989, 960). As described by Kim, Pasadeos, and Barban (2001), an advertorial is "a print advertisement disguised as editorial material". It is in line with Brown and Waltzer (2004) arguing that the advertorial is an important tool used by organized interests to create an advantageous public opinion climate regarding controversial issues.

Advertorials are designed to be more informational, in line with material feature, they typically have longer copy (Cameron & Ju-Pak, 2000). The way of writing an advertorial, according to

(Iriantara and Surachman 2011, 134-138), is related to 5W + 1H; What, Who, Where, When, Why and How. The structure of the text is divided into introduction, body, and closing. In the introduction part, the writer tries to attract the reader attention to the article. In this part, the writer could apply the style of narrative text, descriptive text, questions, epigrams, quotations, or greetings. The second part, is the body of the advertorial. In this part, the writers discuss the content of the advertorial. The third part is closing; it could be contained of questions, statements, or conclusion of the advertorial. In this article the writers try to analyze the advertorial both in Bahasa Indonesia and English related to the theme progression, including the theme patterns and the elements of the theme.

Systemic Functional Linguistics

Systemic Functional Linguistics (SFL) was introduced by Halliday through his well-known book entitled '*An Introduction to Functional Grammar*'. The book was firstly published in 1985 and it was being revised in 1994 as the second edition, and in 2004 the book was revised again as the third edition. In SFL approach, it is stated that language is a system of meaning that relates to three different metafunctions. The metafunctions are *textual meaning*, *interpersonal meaning*, and *ideational meaning* (Sujatna, 2012).

Ideational meaning relates to *clause as representation*. While in the clause as exchange that relates to transitivity, it involves three main elements; *process*, *participant*, and *circumstance*. The second metafunction, interpersonal meaning relates to mood and residue while the mood itself relates to subject and finite, and the residue relates to predicator, complement, and adjunct. One of linguistic features which can be applied to construct a good rapport with audience in text is interpersonal metadiscourse. As Sukma and Sujatna (2014: 16) argue that this feature is closely related to persuasive writing since it specifically explores interpersonal relationship and interaction between addresser and addressee. The third metafunction is textual meaning as the focus the research. This metafunction relates to theme and rheme.

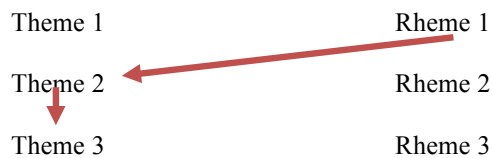
Theme is argued by Halliday (2004: 64) as the term that was taken from Prague school and it was defined as "*the element which serves as the point of departure of the message; it is that which locates and orients the clause within its context.*" Similar to the argumentation, Sujatna (2013: 5) argued that "*psychological subject is a subject that concerns of the message. It is called psychological because it was what the speaker had in his mind to start with, when embarking on the product of the clause. The psychological subject is usually called theme.*" It is mentioned that theme that theme is also called psychological subject while the theme is the rest of the theme as argued by Sujatna (2013: 13) "*The rest of the clause tells the reader something about the theme and 'the rest of the clause' called rheme.*" From the explanation, theme and rheme could be considered as the main parts in understanding the message of each clauses that written by the writer. As a paragraph the relation of one clause to another should be tied up. It could be seen from the thematic progression of the paragraph.

A writer puts the theme first and this orients the reader to what is about to be communicated. Relating to the type of theme itself, it has three different types of theme; they are ideational or topical theme, textual, and interpersonal theme. Ideational or topical theme could be marked and unmarked theme. The unmarked theme could be realized as pronoun, common noun, proper noun or nominalization, while the marked theme could be realized as predicator, complement, or adjunct. The second type of theme, textual theme, could be categorized into continuative, conjunctive adjunct, or conjunction. Interpersonal themes, as the the third type of theme, are ones that indicate something about the relationship between speaker and hearer (Sujatna, 2013: 20). Interpersonal themes could be realized by three different types; they are modal adjunct, vocatives, and finite or Wh-element/ verbal operator (in interrogative).

According to Deterding and Poedjosoedarmo (2001) in Sujatna (2013) there are four different types of thematic progression in a paragraph. The four types are described in the following

Type 1

The most important technological advance of the 20th century is **the computer**. **Computers** now not only sit on desktops in offices and at home; **they** also regulate temperature in our homes, control the function of washing machines and automobiles ...



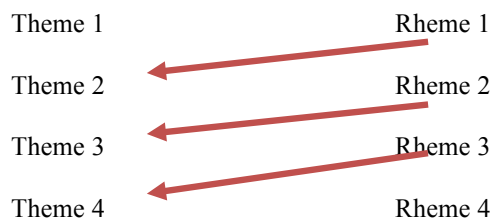
Type 2

Noam Chomsky, author of *Aspects of the Theory of Syntax*, revolutionized linguistics. **He** also happens to be well-known for his political views. In fact, **he** is better-known to laymen for his political views than **he** is for his revolutionary linguistic ideas.



Type 3

The museum is located in the centre of town near **the square**. **This square** is a common destination of **tourist buses**. **The buses**, all belonging to the Island Tour Bus Company, are driven by **the tour guides**. **These guides** get off at each stop with the passengers and explain the sights to them.




Type 4

Everybody likes Mamma Mia. Kids like **Mamma Mia**. Teenagers love **Boogie Burgers**. Parents love **Boogie Burgers**. Grandparents love **Boogie Burgers**.



Type 1 describes that rheme 1 (the theme in the first clause) could be theme 2 (theme in the second clause) while the type 3 describes that every theme could be a theme, in other words theme 1 becomes theme 2, rheme 2 becomes theme 3, and rheme 3 becomes theme 4.

The  thematic progression in type 2 and type 4 are different from type 1 and type 3, the type 2 describes that theme1 becomes theme 2, theme 2 becomes theme 3, and theme 3 becomes theme 4, and so on while the type 4 the rheme 1 becomes the rheme 2, the rheme 2 becomes rheme 3, rheme 3 becomes rheme 4, and so on and so forth.

Besides the thematic progression that mentioned by Deterring and Poedjosoedarmo (2001), earlier Paltridge (2000) describes another types of thematic progression in Sujatna (2013: 28).

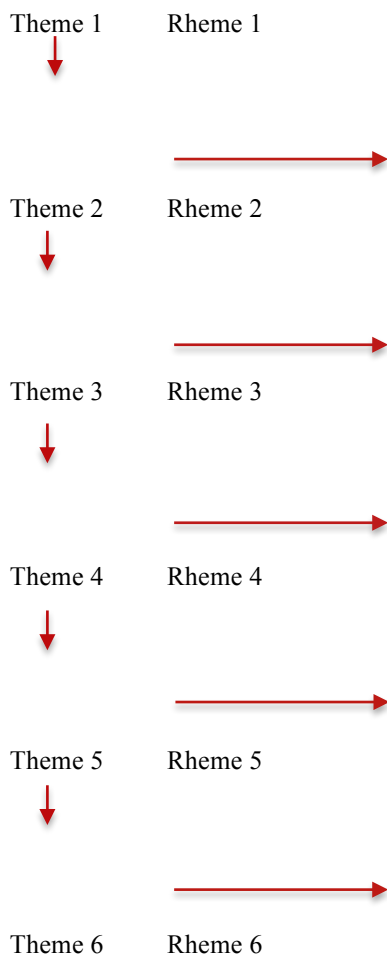
Type 1

Theme

There bat
It
There
Bats
They

Rheme

is nocturnal animal.
lives in the dark.
are long nosed bats and mouse eared bats also lettuce winged bats.
hunt at night.
sleep in the day and very shy.



Type 2

Theme

The American Psychological

Rheme

specifies a documentation format required by most psychology, sociology, communication, education, and economics instructions. includes parenthetical documentation in the text that refers to an alphabetical reference at the end of the chapters.

This format

Theme



1 Rheme 1

Theme



2 Rheme 2

Type 3

Theme

When Japanese people

They

The two alphabets

The Chinese ideograms

Hiragana

Katakata

Rheme

write their language. use a combination of two separate alphabets as well as ideograms borrowed from Chinese are called hiragana and katakana. are called kanji. represents the 46 basic sounds that are made in the Japanese language. represents the same sounds as hiragana.

Theme 1



Rheme 1

Theme



2

Rheme 2

Theme 3



Rheme 3

Theme 4



Rheme 4

Theme 5



Rheme 5

Theme



6

Rheme 6

Theme



7

Rheme 7

Theme



8

Rheme 8

Paltridge (2000) in Sujatna (2013) named it as pattern type 1 is as *reiteration theme/ constant theme*, type 2 is as *zigzag theme/ linear theme*, and type 3 is as *multiple theme/ split theme*. From the two patterns offered by the two linguists, Deterding and Poedjosoedarmo (2001) and Paltridge (2000) it is concluded that the two classifications are important and both of them are complemented one another. Therefore, both of the theories are employed in this research.

RESULT AND DISCUSSION

This research applied some advertorial samples from both Bahasa Indonesia and English higher education advertorials. As a preliminary study, the data obtained from the opening part of the advertorial. The following are the data 1 and data 2 which taken from the opening part of the Bahasa Indonesia higher education advertorial.

Data 1

Theme

PT Telekomunikasi Indonesia, Tbk
(Persero) atau Telkom

TeSCA atau Telkom Smart Campus Award

Dengan adanya TeSCA, suatu
perguruan tinggi

Program yang berlangsung sejak
tahun 2008 ini

Dalam acara TeSCA 2013 di Hotel
Dharmawangsa 1 Mei 2013 lalu,
Direktur Umum PT Telekomunikasi
Indonesia, Arief Yahya
Tiga parameter tersebut
Sejauh ini, TeSCA
Calibration berarti TeSCA

Rheme

menunjukkan komitmennya untuk turut aktif dalam
kemajuan dunia pendidikan Indonesia melalui
program TeSCA.

merupakan program CSR PT Telekomunikasi
Indonesia berbentuk penghargaan yang diberikan
kepada perguruan tinggi negeri dan swasta di
seluruh Indonesia dalam aspek implementasi
information, communication & Technology (ICT).
dapat mengukur diri mereka melalui parameter-
parameter yang memandu mereka menuju World
Class University.

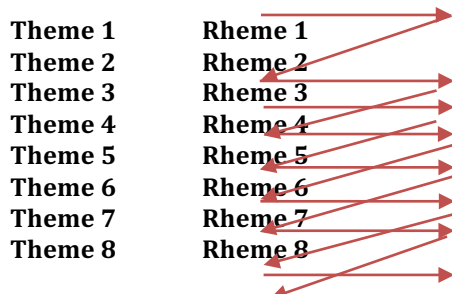
didukung oleh Direktorat Jenderal Pendidikan tah
Tinggi Kemdikbud, Asosiasi Perguruan Tinggi Ilmu
Komputer (Aptikom), dan Dewan Teknologi
Informasi dan Komunikasi Nasional (Detiknas).

mempaparkan bahwa untuk menjadi suatu perguruan
tinggi yang berstandar internasional, ada tiga
parameter yang dapat memandu suatu perguruan
tinggi untuk menyanggah taraf internasional.

adalah Calibration, Confident dan Credibility.
baru memenuhi satu parameter, yaitu Calibration.
sudah melakukan pengukuran tingkat pemanfaatan
teknologi informasi untuk proses belajar mengajar.

Source:

<http://edukasi.kompas.com/read/2013/05/19/00002884/TeSCA..Bukti.Kepedulian.Telkom.pada.Pendidikan>



Data 1 describes that it is the part of the opening paragraph of the Bahasa Indonesia higher education advertorial. The data has eight clauses. The first clause has one theme and one rheme. The rheme in the first clause becomes the theme in the second clause, while the rheme in the second clause becomes the theme in the third clause. It happens to the rheme in the third clause becomes the theme in the fourth clause and the the rheme in the fourth clause becomes the theme in the fifth clause. It happens to the next clause after, up to the last clause, the eight clauses. It could be concluded that the data has zigzag pattern since every rheme in the earlier

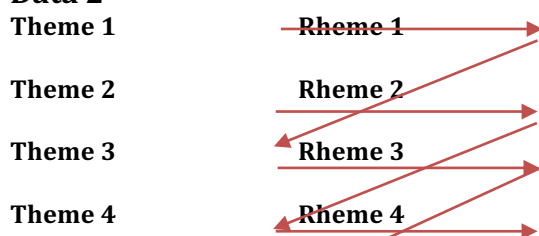
clause constantly becomes the theme of the next clause. From the data shown in Data 1, there are eight clauses and all theme types of the clause in Data 1 is ideational or topical theme.

Theme	Rheme
Menimba ilmu di luar negeri	merupakan idaman sebagian besar pelajar Indonesia.
Salah satu negara yang kerap	menjadi tujuan pelajar Indonesia untuk belajar adalah Jepang.
Negara sakura ini	menyediakan banyak pilihan universitas bergengsi di dunia.
Salah satunya	adalah Ritsumeikan Asia Pasific University (APU) yang menjadi incaran banyak pelajar asal Indonesia.

Source:

<http://edukasi.kompas.com/read/2013/09/15/1409374/Tertarik.Kuliah.di.Ritsuimeikan.Asia.Pasific.University>.

Data 2



Data 2 is a description of thematic progression that is found in the data that has four clauses. The data is taken from the opening part of the Bahasa Indonesia higher education advertorial. The first clause has one theme and one rheme. The rheme in the first clause becomes the theme in the second clause, and the rheme in the second clause becomes the theme of the third clause, it also happened to the theme in the fourth clause that comes from the rheme in the third clause. From the two data described as higher education advertorial in Bahasa Indonesia, it is found that the pattern is zigzag or Type 2 (as described by Paltridge, 2000) and Type 3 (as described by Deterding and Poedjosoedarmo, 2001). From the data 1, that containing four clauses, it can be seen that all the theme types are ideational or topical.

The following are Data 3 and Data 4. Both of data are taken from the opening part of English higher education advertorials.

Theme
KLC College: Healthcare, Business,
Education

Office Administration
They
Assistant program
(that)

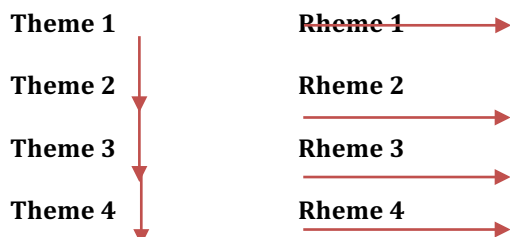
<http://www.klccollege.ca/Data/editor/file/KLC%20College%2020Whitby%20Campus%20Expanding.pdf>

Theme
is expanding the programs offered at its Whitby
Campus - two new career study programs Personal
Support Worker (PSW) and
will be introduced starting in March, 2012.
will be offered in addition to the Educational

has been offered since 2005.

Source:

Data 3



Data 3 describes that the opening paragraph as the data has four different clauses. Every clause has one theme and theme of each. From the pattern described, the theme in the first clause becomes the theme in the second clause, and the theme in the second clause becomes the theme in the third clause, but it does also happen to the theme in the fourth clause that comes from the theme in the third clause. From the data 3 it is shown the four clauses that containing ideational or topical theme of each clause.

Theme

Christianity Today

It
(It)

(It)

Every issue

(that)

Christianity Today

Rheme

is the definitive voice offering the most complete
coverage of the Church in the world today.
informs,
counsels, and

challenges readers with interviews, feature articles,
thoughtful essays and much more.

provides insightful commentary, penetrating
interviews with leading Christian thinkers, and
theological analysis on current issues, trends, people
and news events

impact people of faith.

delivers honest, relevant commentary from a
biblical perspective, covering the whole spectrum of
choices and challenges facing Christians today.

Source: <http://www.christianitytodayads.com/print-media/christianity-today/>

Data 4

Theme 1	Rheme 1
Theme 2	Rheme 2
Theme 3	Rheme 3
Theme 4	Rheme 4

Similar to data 3, data 4 is as an opening of higher education advertorial in English. This paragraph has four clauses that has a similarity with data 3. Both of the paragraphs as higher education advertorial has a similar pattern; that is reiteration pattern or Type 1 (as described by Paltridge, 2000) and Type 2 (as described by Deterding and Poedjosoedarmo, 2001). The data 4 which is similar to data 3, it has four clauses containing ideational or topical theme of each.

CONCLUSION

The data analyzed are in both the higher education advertorial in Bahasa Indonesia and English data. It is found that the thematic progression found in English and Bahasa Indonesia has different pattern. The thematic progression in Bahasa Indonesia higher education advertorial is zigzag pattern while the thematic progression in English higher education advertorial is reiteration pattern. From the data draws in Data 1 up to 4 above, it is described that each data has different number of clauses. From the analysis, all the clauses of each data contain ideational or topical theme of each.

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Promoting freedom in education. Study of a case.

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ABSTRACT

Contextualized the value "freedom" in relation to current problems, the liberty's and various ways of conceiving freedom is defined, as well as the demands that their metaphysics and anthropology demand. Then it is interpreted in relation to human rights and other values, human and social virtues, etc., pointing out the way of presenting values' freedom in schools' conflict. Then the main models and procedures to promote them are considered, with the possible curricular derivations. The aims are related with the followed heuristic issues: a) How to teach humanitarian principles? b) How to promote Human Rights? c) What issues and values are promoted through the curriculum? d) Related to freedom, what issues & values are promoted? e) Are there contradictions in the teachings? f) Is it possible to implement this model? g) Is it possible to carry out such a model-value? The method of research is analytical, transversal case study, without sample type and size, taking advantage of only the opportunity to interview. But, before a phenomenological and hermeneutical procedure was made, configuring a network to interpret axiological skills results' for the questionnaire's items. The population had surveyed wear teachers and students. The distribution by years/population is as follows: 2008: 1130, 2009: 995, 2010: 1468, 2011: 959. With a questionnaire, a provincial reality is analytical-empirically studied. Defining the model as proceduralist, proposals to supplement it are offered. Main conclusions: The issues and values related with freedom are promoted through the curriculum are consistent with the statements mentioned in the theoretical framework. The results of teaching and learning do not remain in mere rational exercise. The teaching of peace are understood in the curriculum does not follow that it develops more personalizing than intellectual. The found model is largely procedural. The education for full freedom is not complete, because it is not clear that there are content with human values. On Human Rights' education, there is a certain ambiguity between the transversal and notional of values and themes. Teaching the curriculum development is insufficient, so it shall be possible to implement an integrated model.

Keywords: Freedom's values. Human rights. Models of values education. Theory of "freedom".

INTRODUCTION

Elzo (2006) exposes the contradiction between the finalist values (freedom, equality, justice, solidarity ...), which are very appreciated by young people, and a weakness of the instrumental values (commitment, effort, dedication...), who train to practice the first ones. This litigation can be a factor of contradictions and conflicts (Fernández-Llèbrez, 2009). Besides near 70% millennials don't think it's essential to live in a democracy, and a growing number of young Americans think democracy is a bad way to run the country, so the number of citizens who desire army rule has gone up in most democracies around the world (Foa & Munk, 2015). The paradox is that in Spain is the old people who resist the arrival of tyrants, while in Venezuela are the young (Rubiales, 2017). Postman claims students are asked to several "false gods": economic, consumerism... (Levinson, 1995), which leads to critical situations.

Given this, suspension and expulsion from school are used to punish students, alert parents, and protect other students and school staff. In front of crisis into schools, highlights aspects of

expulsion and suspension that jeopardize children's health and safety. This is because these may exacerbate academic deterioration, and when students are provided with no immediate educational alternative, student alienation, delinquency, crime, and substance abuse may ensue (CSH, 2003).

Moreover, we have situations related to immigration that are creating problems arising from multiculturalism, who promptly reach even racism; also, free partisan models on educational policies has to be added, etc. Among the mentioned aspects, there is another type of conflicts in certain autonomous communities, parents and teachers face each other for linguistic reasons, for gender ideology, for the teaching of religion, etc., similarly with language, mathematics and the way they are taught (Powell, 2010).

To interpret this wrongly carries wrongdoing, why has been observed that our society does not work well (Soëtard, 2011; Peiró, 2008). One of its factors is because the social and economic development is linked to freedom (Cabello, 2003; O'Hearn, 2009). But, as there is no consistency between freedom and intellectual training/implementation (Moshman, 2003), there are conflicts. We know citizenship is connected to values, as opposed to the authoritarian model (Dovemark, 2004: 657ss).

THEORETICAL FRAMEWORK

Liberal democracy is the institutionalization of Human Rights, as a most practical solution to the freedom of each human being compatible with the freedom of all. Related this with the introductory context, conflict has been inescapable public schooling reality (Unicef, 2011). The democratic way of life aims at allowing individuals some measure of control over their lives and allows for a pursuit of unique potential rather than being passively impacted by external, uncontrollable forces in a futile attempt at isolation (Jackson, 2014, p.16, in Beesley, 2016). Necessary attendance to a formal institution is subject to legal penalties and social conflict, inflicting upon people's liberty and property.

Furthermore, it is neither sufficient to describe us as a field or to assert we are free. Some larger ethical and philosophical view (Millán-Puelles, 2009) of humanity must serve as a framework to integrate basic assumptions and help select eventual solutions to our problems. Because the person is free for to be cause of their own actions (Fabro, 1983: 22-25). However, it is not absolute independence, that emancipation it slows down the social coordination (Meyer, 2007). So, in the current democracy, education must solve the contradiction freedom/authority, which solution guarantees certain order (Cociña, 1991), wich leads to the development of the personality. The key to this goal consist on to cultivate the critical awareness (Duvemaryl, 2010), because the intrinsic root of freedom is free reasoning-willing (García-López, 1991).

Consistently, anyone born personally free (Reyero, 2003) because it not born with civic values. Moreover, the free human no man confers to himself. This means the free will is not given to man in a purely natural way, however, because of what was said before, we have the need to educate it (Millán-Puelles, 1988, 65-66). And this kind of education is possible and necessary if exploited the innate potential of self-control that the person essentially has. This is an aspect of innate dignity of man as a person (Millán-Puelles, 2009, 59).

Regarding personal citizenship, a free person is not only who is not in coercion; the idea, inherited from the conflicts of the seventeenth century, that a free society - one governed by principle and by law - is a necessary condition of personal freedom (Sedley, 1999, Ch.1). So without a citizen may choose, but he is limited by the law (Dürr, 1971:18), so there should be

rights and duties (Lalande, 1967:575ss). And these are prepared from family and school education.

In this regard, it has been shown that very different individuals, working in different levels of education and with different intellectual interests, can give rise to a learning environment in which freedom prevails with responsibility, generating more and better cultural results (Rogers, 1996, chp.1). By consequence, there will be a new indicator of educational quality: liberty-creativity (Mazón, 1974).

To understand the nature of freedom remember the thesis of Millán-Puelles: It is accident, not substance; each one has it, but to be it is not enough, because it is not absolute, but relative. Regarding the 'subject' of freedom, it depends of a principle or cause. Regarding its 'object', it is 'freedom of indifference'. Freedom is of two types: an inferior, innate; and another superior, acquired. The innate is triple: the double 'transcendental' of the understanding and of the will and the free will (*libero albedrio*) of the will. Seeing it as acquired, this is double: civil and moral. It derives from necessities and is subordinated to those. So, freedom is limited. The maximum form of freedom is the 'election' of God (Sellés, 2014, 189-224).

Besides, social lives are closely related to communication as education is defined as the acquiring of a body of knowledge through systematic instruction that is to an individual, enlightening. Civic life and therefore specialization can expand human educational experiences as a necessity, by virtue either of logic or of natural law and to advance ones 'life' or human existence and flourishing (Beesley, 2016).

The before introductory brushstrokes do not express that educating for freedom is not the same as educating in freedom. The reason is that the freedom of, in and for it, there are no citizens capable of deciding for themselves. Of the last we can see example from Norway in matter of Religion. The freedom of religion in Constitutional's clause is a case in point and illustrates the complexity and challenges stating faces when these seek to harmonize national law with international human rights (Vik & Endresen, 2017), which is related to conflicts, that has changed in many ways since the introduction of the four freedoms (of speech, of worship, from want & from fear).

Nevertheless, education provides a unique contribution to mitigating and transforming the causes of violences, as recognized by the 2015 *Sustainable Development Goals*. Considering the multicultural situation as risk, the activities in the classrooms and out-of-school over time, schools and non-formal education activities can promote the respect of human rights and values, thus allowing more inclusive societies and strengthening the social cohesion (Connolly & Ospina, 2016).

The benefits of educational freedom are: social harmony; *improved equity; greater diversity, innovation, and quality* (Cato Institute, 2017). Consequently, educational choice is individual human action, therefore enforced state education ignoring individual diversity by an uniformist national curriculum set by the bureaucratic process prevents, or ignores the practice of freedom. On avoiding this, teachers must rethinking of the means, methods, and institutions most suitable for the values education of the child (Ryan in Rothbard, 1999, p.5).

Human perfection (happiness) is activity in accordance with the moral and intellectual virtues." (Wiles in Trapani, 2004, 92). Education would then require more specialisation as there would be a need for more general social and moral rules (e.g. rules for the whole

community), but there would also need to be more specific social and moral standards which apply to specific interactions (Brook et al., 2014, p.4) tells Beesley (2016).

Musso (2003), from considering inhuman acts, motivates us to distinguish morally those of man (natural) as they are derived from physiological functions and unconsciousness, from the strictly human, which come from the intellectual valuation, by which, the conscience emits attitudes (like intentions, purposes) to act with will, that is, freely. In this sense, an act of resentment or anger towards someone, even if it is not perceived by the surrounding people, is conditioning the sociality of the person who suffers it. This is so because the community (*polis*) is the place where freedom can be manifested and, if carried out in an unreflective way and linked to the material, the subject becomes dehumanized (Arendt, 2002).

Depersonalization is that experience characterized by a feeling of detachment from one's own body or mental processes, with symptoms of identity confusion. It is a feeling of uncertainty, perplexity, or conflict over who students are. The main dissociative symptoms are the depersonalization and a derealisation (Torto, 2013). That is because each individual develops a personal framework of meaning which may vary from an inconsistent mishmash to a thoughtfully integrated network of beliefs and values. Hence there is a need to help students understand this connection and to inspect some of the more fully articulated life stances influential in their culture (Hill, 2004, 7-9). Corollary, it will be understood that this must begin by developing awareness and reflection (discernment) among schoolchildren in relation to civic and moral behavior.

Nowadays, at schools nobody talks about "good" and "evil", because people usually talk about values. Political parties discuss on values; Constitutions are considered as "value systems". Supposedly we live in a time of declining values, or perhaps values that are changing ... However, talking about values is both trivial and dangerous. It is trivial because each community, even if it promotes plurality, must share certain things that its members consider valuable ... talking about the State as a "community of values" is dangerous, since it tends to undermine this secular principle in favor of a dictatorship of political convictions (Spaemann, 2001).

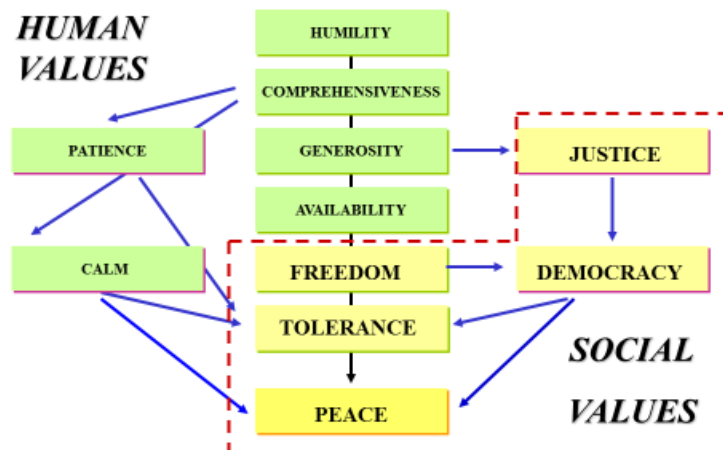
Therefore the end of education is not only being autonomous (understanding this as individual independence of others), but to be educated to self-control (Foray, 2011:343ss). Therefore, education is not only to normalize, because there is some need to press to promote attitudes as responsibility, respect, recognize the fault, etc. (Dürr, 1971,114). Therefore, education in & for freedom requires to build other values with it (Peiró, 1996, 1999...) in order to develop the project of life (Touriñán, 2006).

Otherwise, various ideologies for decades have considered certain partial dimensions of the human being as absolute values and, in doing so, have generated clamorous injustices to establish in the world a kind of tyranny of normality, that world is inevitably dehumanized (Agulló, 2013). Human willing (*libero albedrio*) does not have the highest value among all that man can possess, because beyond the value of this form of freedom is the value of freedom that is achieved with moral virtues (Millán-Puelles, 2009, 173). Therefore, it is necessary to recover the sense of education, even if it is with minimum values that promote the global dignity of each student and teacher.

One way to reintegrate common sense into educational processes could be to consider the dependence that freedom has on other human virtues. For this we will reflect on everyday life, making Figure 1. This example that follows should be taken as such. Each subject would make

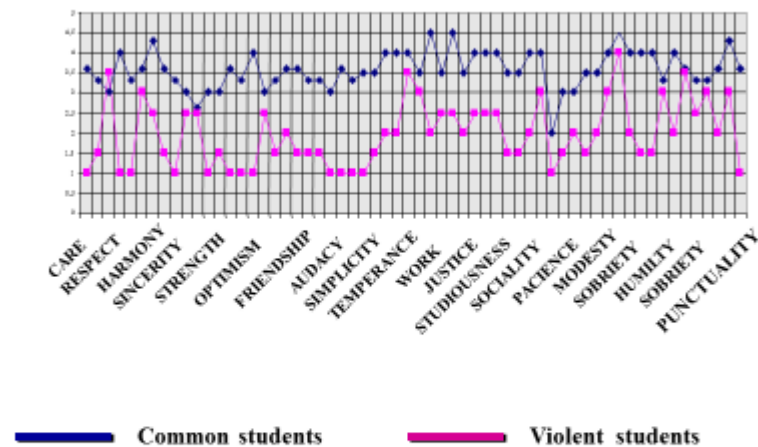
his phenomenological way. What we want to highlight below is that freedom itself has no validity without being "filled" by other human values, like the other social virtues, because they would be hollow, they would be mere talk.

Figure 1. The social values need the human values to be effective (Peiró, 2002).



Starting from below we have: a classroom must perform the exercises in peace, for which tolerance is required; nevertheless, a student will not tolerate if he does not perform in freedom. This last virtue will facilitate democracy. However, free will is not possible if a subject is not willing to show availability, an aspect that depends on their generosity. But, if someone don't understand the situation and its meaning, then they can't know how to be generous, since this would mean not knowing to whom this value applies. However, humility is required for such a task (which is not an inferiority complex). The reinforcement of freedom emerge from the last two: patience and meekness; as well as justice as pro-democracy freedom.

Absolute freedom does not exist, since a person is a slave to his limitations and the imposed by the world around him. Thus, we have two types of limits: natural and social. The combination of both positive and negative potentials give normal or conflicting behaviors, with higher or lower levels of values, as the figure 2 offers. Those in the educational field, as they are the object of general systematization, are the latter. Such are those that we impose ourselves to live with the other members of the classrooms. For which it has to know the values that have to be practiced and, when living them, they must possess some virtues or habits, which are the qualifiers of the educational action.

Figure 2. Differences in values between students (Peiró, 2008).

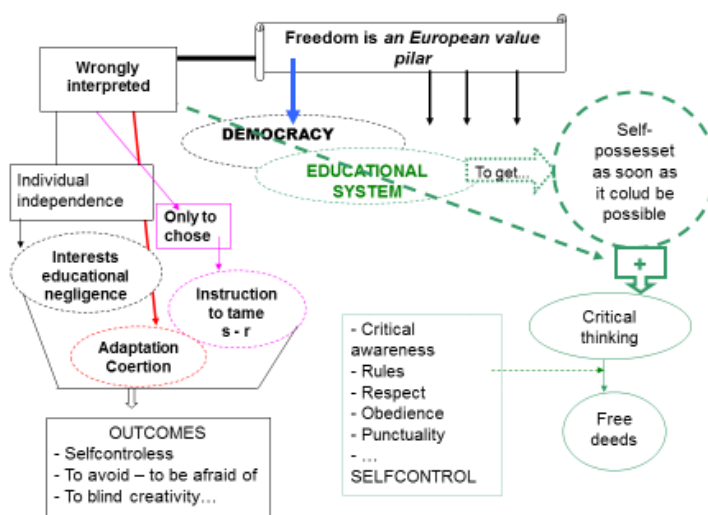
Source: Peiró, S. (2005). *Indisciplina y violencia escolar*. Instituto Alicantino de Cultura, del CSIC.

The example of Figure 2 consists on two series of points are presented, joined by segments. Each point indicates the position of the attitudes or habits practiced by the students. The series located at the top corresponds to the common students; the one plotted below the previous one refers to the violent ones. This denotes several theses: a) There are no students without values (all have dignity). b) Those who find in the row above show a higher level in the value constitution of their subjectivity; those of the lower part, manifest more deficiencies in virtues. From which we infer that the values provide criteria to discern coexistence behaviors, as well as inject strength to carry out the purposes. As a result, education must include them in their designs.

There are supporters of considering values and moving coexistence through rules and lessons. This means a depersonalisation and generates conflicts (Peiró, 2001). Others say education only has to raise values and that the rules should be generated spontaneously among students, as well as let them look for the science subjects' information that each one needs. This causes uncertainty, insecurity and conflicts. Between the romanticism or primacy of the valoral sentiment, and the rigorism or primacy of the regulation, a middle term must be programmed, the law as an expression of the general good willed by man, but guided by values.

However, pedagogical models can't teach and make that all behave with identical values of schools, even if they are minimal (Hjort, 2006; Spaeman, 2011). This proposal takes us to integrate human rights and other ethical principles in the construction of the qualitative model of education (Peiró, 1982^a; Wahlström, 2009). Notwithstanding doing it not multidisciplinary, but integrating them into the lessons (Peiró, 1981, 1982^b; 2008; Nyroos et alii, 2004; Philippou, 2005). All this is made from an civic humanism (Irizar et alii, 2010), that goes on beyond the mere technical instruction (Delgado, 2010), because there is no neutrality in the teaching of unethical contents (Barrio, 2003:139-145), since in the curriculum development are involved in and are interpreted rules with values to introduce rights and duties (Gonçalves, 2004, 147ss).

Figure 3. The teaching ways on freedom



Schematically, Figure 3 shows antagonistic ways of understanding freedom. One that understands it as independence, which is only considered as the ability to choose, so the school should only be non-ethically, leaving schoolchildren to play their interests and relating people with adaptive or coercive styles that not promote a self-control (Huxley: A happy world, with Skinner's theory: Walden dos). The other way conceives democracy in freedom with the use of critical thinking, as means to achieve in each scholar, their own possession, which entails a series of virtues such as critical consciousness (discernment), norms, respect, ... (human virtues: Isaacs) for have an self-control, and, therefore, free actions in a freedom's environment. So, as it is before said (Peiró, 1982^a), is necessary to inserter the Human Rights combined with skills coupled with knowledge and attitudes to reach a self-control (Sadio, 2011).

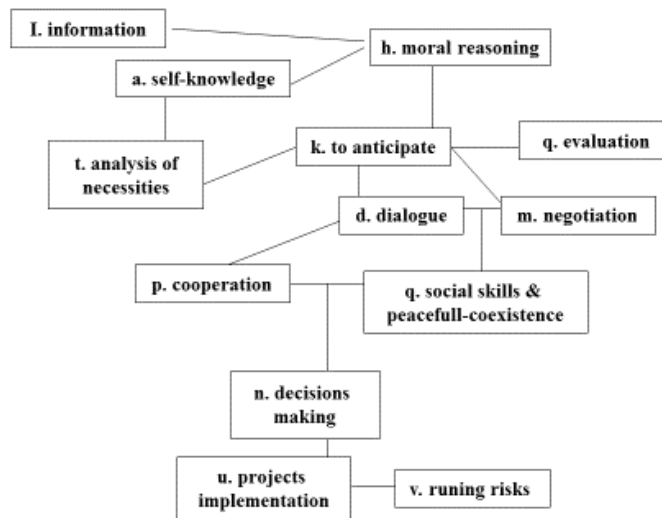
The Component Display Theory (Merrill, 1983) considers the transmission of the curriculum dividing the information in four dimensions: concepts, facts, procedures and principles and their presentation form in: rules, examples, memories and activities. Establishing a parallelism with education regarding freedom and its values, applying the general to this specific virtue, we have the following models, procedures and techniques (Peiró, 2013): A) The imitation (Sears, 1957; Whiting, 1960; Stotland, 1961, mentioned by Whittaker, 1979, 173). B) Changing of attitudes based on an informational approach, or by influence of third parties, stimulation, etc. (Morris, 1992). C) To promote empathic capacity in students (Elias et al, 2000; Bussenius, 2012). D) Develop philosophy lessons for school's children (Lipman, 1988). E) Values clarification (Howe y Howe, 1980). F) Promote moral reasoning by posing moral dilemmas (Kohlberg, 1989). G) Interacting with authority and control, focusing on rules and sanctions (García, 2008; Soria, 2008). H) Achieve morality through agreements carried out in assemblies and school debates (Wales, y Clarke, 2005). I) Instill values through a rote instruction (Ibáñez-Martín, 1983; Ramallo, 2012). J) Character education to achieve maximum self-control (García-Hoz, 1975; Ibáñez-Martín, 1983; Shaps et al, 2001). K) And for the achievement of an integrated education: to develop lessons of the curriculum with values, with a humanistic foundation (Ibáñez-Martín, 2010) from the perspective of an inter / transdisciplinary model (Peiró, 1982).

HEURISTIC QUESTIONS

In each group of values teaching dimensions, it has operated analogously to what is shown in Figure 4 (regarding the values teaching models). From a phenomenological and hermeneutical

procedure was made (Smeyers, 2011), configuring a network to interpret axiological skills results' for the questionnaire's items (53a-53ah).

Figure 4. A nomological net for values teaching models



As has been said, the values and promotion of human virtues are key to preventing and modifying critical situations, as well as to channel conflicts. In this regard, we ask ourselves about the way to do it in the classrooms. Therefore, heuristic issues arise: a) How to teach humanitarian principles? b) How to promote Human Rights? c) What issues and values are promoted through the curriculum? d) Related to freedom, what issues & values are promoted? e) Are there contradictions in the teachings? f) Is it possible to implement this model? g) Is it possible to implement such a model?...

METHODOLOGY

The population had surveyed wear teachers and students. The distribution by years/population is as follows: 2008: 1130, 2009: 995, 2010: 1468, 2011: 959.

Figure 5. Percentages of answers to the set of questions 47.

YEARS	ITEMS SURVEYED PEOPLE NUMBER	47 .a	47 b	47. c	47. d	47. e	47. f	47. g	47. h	47. i	47. j	47. k	47. l	47. m
2008	1130	51,2 %	75,4 %	63,5 %	79,9 %	66,2 %	64,8 %	54,1 %	70,0 %	30,1 %	69,4 %	8,5 %	81,1 %	34,1 %
2009	995	57,7 %	76,9 %	51,0 %	75,5 %	70,9 %	74,2 %	62,2 %	64,8 %	44,1 %	67,1 %	19,2 %	82,0 %	17,5 %
2010	1468	53,6 %	80,9 %	44,3 %	65,5 %	69,3 %	79,0 %	64,5 %	57,9 %	46,5 %	62,5 %	27,9 %	69,5 %	9,3 %
2011	959	47,9 %	75,9 %	34,1 %	57,9 %	65,2 %	69,8 %	58,1 %	46,8 %	45,5 %	58,7 %	31,9 %	61,9 %	7,8 %

However, there are no unanimous answers. To understand it, let's see an example by Figure 5, showing the percentages of each annual group and answers for each item & by year.

A model that relates theory to reality was made (Peiró, 1998). This instrument is the questionnaire to survey. It consists on a part of the 83 items' located in <http://violencia.dste.ua.es> in tab *convivencia*, insiting in this by the key: *p_estudio*, readers could be analyzed all its parts. Each question is formulated in a Likert-type scale, for later calculations, facilitating a rate of the teachers, according to the intensity with which them practice, following the same scale and within the parentheses, namely: always (5) almost always (4) sometimes (3) rare (2) never (1).

Considering other convenient questionnaire's sections for this study, we have the following questions:

50. *When working on certain axiological issues, what is the main objective you intend to achieve? () Inculcate the values that I personally understand, so that your student is good. () Motivate students to think and decide for themselves. () Influence so that the behavior of the student changes. () Improve compliance with standards within the classroom. () Get more discipline and order to be able to work. () Others (specify).*

51. *Of the topics listed below, which ones teach or have you taught? Please rate them according to the intensity with which teachers and teachers practice them, following the same scale and within the parentheses, namely: always (5) almost always (4) sometimes (3) rare (2) never (1) Self-knowledge. () Relationship between partners. () Relations in the family. () Discrimination based on gender. () Coexistence in school. () Skills for dialogue. () Scientific and technological advances. () Ecological problem. () The diversity of the students. () Human rights. () Civics. () The values established by the Education Law. () Constitutional values. () Others (specify).* They have been selected the teaching-themes, procedures, and so on concerning freedom's teaching. Then, a questionnaire was drawn up, such as the Figure 4, which represents the structure of the item 51. Moreover, concerning the teaching-themes more concerned with the freedom, these are the following: *Self-knowledge, the Human Rights, Civics, Values Educational Law's, and Constitutional values.*

The follow statistics was calculated "t" (of Student), that ensures there is no statistical error to work at the confidence's level of 95%.

Other statistics was calculated, this are: μ averages, σ standard deviations (2008: 0,119, 2009: 0,302, 2010: 0,123, 2011: 0,082). It is noted that all are < 1 , so the μ statistics are closed.

Bearing in mind that Person's correlation does not give us any information, because items are elaborated by scale and the others is binary, then dispersion diagram draw us unrelated data, since there are only 10 possible points. Accordingly, the calculation of Chi-square was made.

χ^2 Chi-square in order to draw inferences. The more likely the items compared are to be independent; and vice versa, the higher the value, there will be more dependence between the data pairs (Monje y Pérez, s/f). For our case, calculating with a degree of confidence of 5%, those who give $\chi^2 > 9,488$ will be dependent; if $\chi^2 < 0,711$ we have that they are independent.

The Figure 6, on questionnaire items & findings, at the third of the columns, the rest of the most significant questions for this study, in relation to the previous theoretical reflections and the results are offered.

As an empirical method in not enough to make decisions, but helps for it, rely not only research on the interpretation of empirical data, the hermeneutics and phenomenology (Smeyers, 2011) to build relationships between issues, values and reality are both used.

FOUNDNS

Taking the data corresponding to the enunciation of the manuscript, we can make a double entry box (Fig. 6).

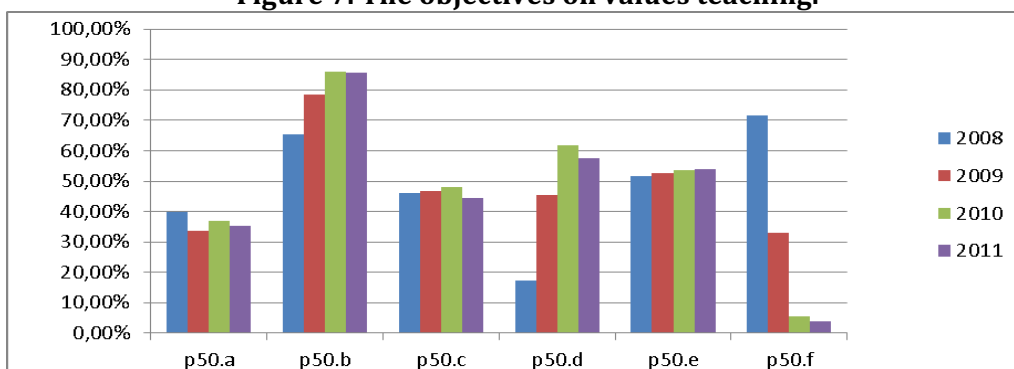
Figure 6. Questionnaire's items & findings

From the theoretical framework	Emerging issues	Questionnaire's items	Funds concerning of questions
1. Conflicts, solutions. Peace.	a) How to teach humanitarian principles?	51	51 dd) The <u>respect</u> : 55 – 88 %
2. Opposition to the authoritarian model.	b) How to promote Human Rights.	51	51 c) The dialogue: 70-78%
3. Promoting choice and elicitation of self-peoposals. Rights and duties.	b) How to promote Human Rights.	4	49b) "Relationship with partners" (80-90%) 51a) Self-knowledge: 70% and 51n) to make decision: 70% united 51p) to cooperate: 45 - 70%);
		9	
		5	
		1	
4. To develop the personality for making a critical way	d) Related to freedom, what issues & values are promoted?	49	49b) Relationship with partners (80-90%) 49e) School's peaceful-coexistence (/45 – 80%), 49c) Relations with the family (55 – 78%) 49d) Gender (60 – 70 %) 49j) Human Rights (37 – 65%) 49k) Civility (37 – 52%) 49m) Constitutional values (21 – 32%). 50d) improved understanding of standards (between 18 and 62 per cent) 51e) The critical understanding: 65%
		50	
		51	
5. Promote human virtues, rather than normalizing.	c) What issues and values are promoted through the curriculum?	50	50e) maintain order and discipline (around 50%).
6. Inter / trans-disciplinarian curriculum.	e) Are there contradictions in the teachings?	5	50b): motivate them to self-decision: between 65% to 85% χ^2 among items 51a, 51e, 51j and 51k, respect others 60, 61, 62, 65, 66, 67 and 68.
		5 1 60, 61, 62. 65.	
7. Don't force, even for a proposal of minimum values.	b) How to promote Human Rights.	51	51a) The self-knowledge:70% and 51n) to make decision: 70% united 51 p) to cooperate (45 - 70%)
8. Students keep their self-control.	f) Is it possible to implement this model?	51	51b) Autonomy-self-regulation (45 – 65%).

The first column synthesizes the theoretical framework in 8 sentences. The second vertical series refers to the questions that are interpreted from the 8 mentioned theses. Next, the numbers of the items corresponding to the questionnaire are written. The last column shows the percentages that the respondents give to each issue question.

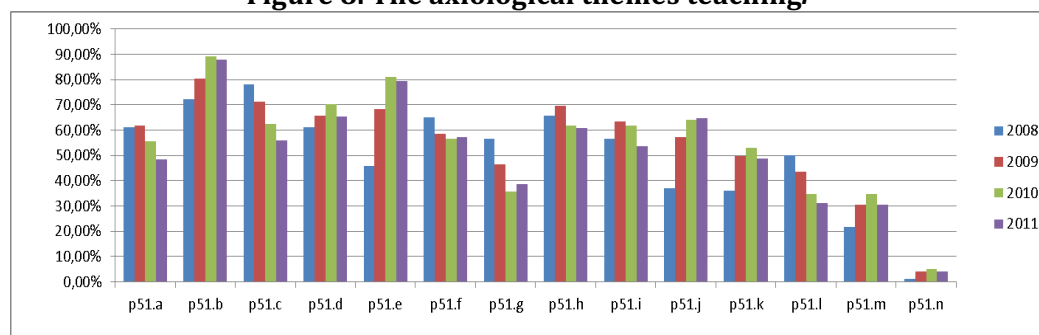
To know the objectives (Fig. 7) that the schools intend to achieve in relation to such values (items 50^a-50^f), the most important items are selected: (50b): motivate them to make self-decisions (between 65% and 85%); (50d) improved understanding of standards (between 18 and 62 per cent) & (50e) maintain order and discipline (around 50%).

Figure 7. The objectives on values teaching.



As well, the themes in teaching (Fig. 8: items: 51a-n): 51b) Relationship with partners (80-90%), 51e) School's peaceful-coexistence (/45 - 80%), 51c) Relations with the family (55 - 78%), 51d) Gender discrimination (60 - 70 %), 51j) Human Rights (37 - 65%), 51k) Civility (37 - 52%), & 51m), and Constitutional values (21 - 32%).

Figure 8. The axiological themes teaching.



As it was said in the state of the 53 question (Figure 9), it is necessary to contemplate the approach of the teachings on skills, abilities... teaching. The empirical calculation of means offers the following theoretical aspects taking prevalence over community interactions. The results are: 53c). The prevalent is the dialogue (70-78%), 53ad) the respect (55 - 88 %), 53a) the self-knowledge (70%) and 51n) to make decisions (70%) united, 51p), to cooperate (45 - 70%); 53e), a critical understanding (65%), & 53b), lighter weight is autonomy-self-regulation (45 - 65%).

Figure 9. The skills, abilities... teaching.

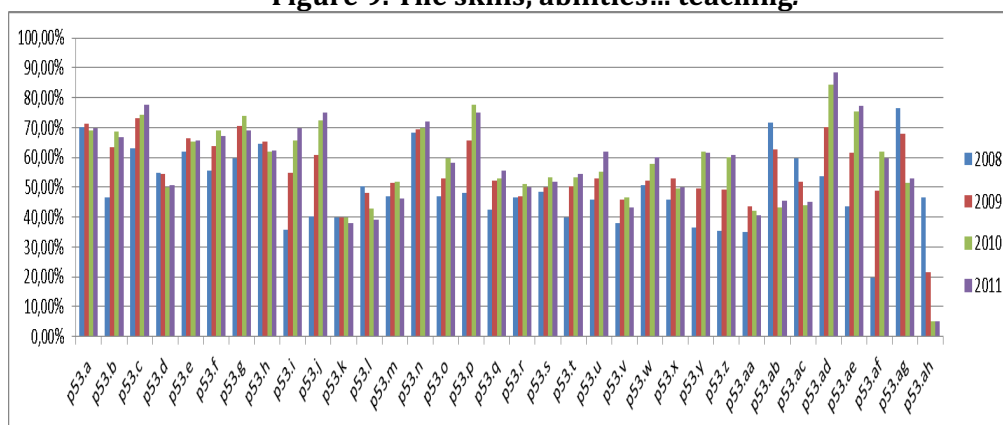


Figure 10. Teaching procedures and techniques %

	47a	47b	47c	47d	47e	47f	47g	47h	47i	47j	47k	47l	47m
2008	51,47	73,73	63,73	80,27	66,49	65,07	54,31	70,31	30,22	69,69	8,53	81,42	34,22
2009	57,80	77,04	51,06	75,63	71,00	74,32	62,34	64,95	44,21	67,27	19,23	82,18	17,52
2010	54,84	82,79	45,30	67,04	70,94	80,77	65,99	59,23	47,53	63,97	28,57	71,08	9,48
2011	52,85	84,67	37,36	68,19	73,41	77,32	66,88	53,02	51,55	65,58	36,54	70,15	8,81

As shows Fig. 10, the most used procedures are: debates, clarification of values, change of attitudes, cultural activities, moral reasoning. The least used are: moral dilemmas and philosophy for school children. Assemblies and the performance of roles would be in an intermediate acceptance, although the lessons with values are a little higher than the last ones. If the results are criticized pedagogically, a certain contradiction is found, even among the most practiced. We also have the paradox of highlighting moral reasoning and reducing the use of dilemmas, being two names of the same reality.

Figure 11. Curricular structure of the teaching of such values.

	52a	52b	52c	52d
2008	58,64	13,36	58,25	52,16
2009	56,22	16,74	52,79	29,83
2010	58,79	17,43	45,86	12,36
2011	48,75	24,38	50,71	9,79

Interpreting the table, a few brief considerations can be said. The teaching of the values concerning the freedom in peacefull-coexistence are not systematized by areas or departments, few are doing so (between 13.36 and 24.38). The majority, without reaching 60%, teach in the form of transversal knowledge, and a percentage located around 50% promotes them in the tutorials ways. For the sum of percentages, there is a combination of both procedures.

The Chi-squared test (χ^2) among the most outstanding items was calculated (Figure 12).

Figure 12. Relationships: values performance and school civility.

Behaviours' students. Themes of Teaching.	60 Imple- ment ruls	61 Not be bothe- red	62 Not disor- der with teache r	65 There are quarrel	66 Work without teacher	67 Don't respect for teacher	68 Rampage in classroom without teachers
51.a Self- knowledge	11,78	3,94	9,13	2,81	10,14	9,72	18,13
51.e School's peacefullco existence	31,20	44,80	7,51	35,27	9,13	22,23	22,24
51.j HumanRights	6,37	3,11	8,21	18,13	11,15	9,91	11,91
51.K Civics	13,84	8,86	11,91	35,12	11,98	15,08	12,34

There are the dependent variables because clear independent variables does not exist. There are not despicable relationships between items and behaviors. The couples with $\chi^2 > 9,488$ are more related, they are interdependent: A) Self-knowledge shows dependence with: complying with the rules, not disturbing as much as the teacher does not present, they do not respect the teacher, and there are disturbances when the teacher is not there. B) When peacefull-coexistence (civility in freedom) is taught, the same thing usually happens as what is described

for A. C) The teaching of human rights shows dependencies with: fights, work without a teacher, disrespectful with the teacher and disturbances without the presence of the teacher. D) Teaching citizenship shows dependence with: complying with the rules, but there is disorder and fights, they work even when the teacher is not there and there are riots. This leads us to lower that activities on personalization are more educational than learning subjects.

DISCUSSION AND CONCLUSIONS

If liberal democracy is the institutionalization of Human Rights, as a most practical solution to the freedom of each human being compatible with the freedom of all, it would be convenient for teachers to understand the need to integrate human and social values. This is so that the results of teaching and learning do not remain in mere rational exercise.

The issues and values related with freedom are promoted through the curriculum are consistent with the statements mentioned in the theoretical framework. Generally, schools not educated with no limits or allowing the spontaneity of the desires, or the full power of a collective.

The teaching of aspects of the semantic field of peace are understood in the curriculum as notions about human rights, self-knowledge, teaching regulations, constitutional values, coexistence, self-knowledge and critical thinking. It does not follow that it develops more personalizing than intellectual. Nevertheless the model is largely procedural, although there are some authors that supplement it, taking into account the full development of subjectivity with human virtues and self-management. Therefore, the need to be supplemented is appreciated.

A way to complete the procedural approach would be the appeal to the solution of conflicts (items 60 - 68), to build each and / or group the necessary values to solve it and the actions so that they become virtues within the community-classroom (freedom in and for).

About how to teach humanitarian principles. When it is intended only motives or understanding of the rules (item 50), it is taking whole freedom in an external approach to the depth of the self. Therefore, education for full freedom is not complete, because it is not clear that there are content with human values, which would give the "do the good you want."

On to promote Human Rights. There is a certain ambiguity between the transversal (item 48) and notional approach of the values and themes, and on the other hand (items 49) indicate the interaction between equals, as well as encouraging (item 51) critical thinking, self-knowledge, deciding or cooperating. However, they could be understood as consecutive parts of the same process.

Related to freedom, on issues & values promoted, the prevalent ones are: to promote good relations with classmates; the understanding of school's peaceful-coexistence; foster good family relationships; notion of gender; understand human rights and citizenship; the values of the constitution; understand school regulations; and develop critical thinking.

However, as some references on the state of the question appealed to the core of freedom, which is specified with other values, such aspects have not been added to the open questions. So the curriculum development is insufficient. Perhaps, the tutorial approach (punctuated in all near 50%) should be researched on knowing if such virtues are contemplated in such educational dimension.

It shall be possible to implement an integrated model. Since the item 51b would lead us to consider an aspect that would conjoin the freedom of and for: autonomy and self-regulation.

This aspect is scored between 45 to 65 percent of the answers. However, with the survey procedure this aspect is unrecognizable, it should be placed in the classrooms to analyze (micro-teaching) and also make a hermeneutics of the exercises of the students.

It has been expressed that, the teaching of values related to freedom, have focused on the development of cross-cutting issues, but also on developing tutorial interactions. As it is said about the couples, the chi-square leads us to infer that there are more educational activities on customizing learning of subjects, without expressing that the latter does not contribute to the formation. So, it seems tutorials offers better results than lessons. On this, we should find out how are developing the firms.

Considering the correlations, there is a certain doubts regarding the implementation of the procedural model. That statement is based on, if the constitutional values are indicators of the human rights' realization, as well as the civility, which is incarnate at school as peaceful-coexistence, it could be noted that there are an inconsistency between this declarations and the real misbehaviours. This could be caused by the mere memoristic approach, or understanding it with some affective education in values relative to the freedom.

In short: The model of education in / for freedom indeed is collected in the schools, as teachers refer in its answers.

PREScriptions

The university curriculum for initial teacher training, should include educational courses for to provide criteria that teachers to be able to:

- A) Know the effects of values, attitudes and virtues in the structuring of each student's self, and the importance of educating in / for true and full freedom.
- B) Relate pupils' educability, anthropology and axiology concerning pedagogical and didactic derivations. This means that they know the different models of educating in values and their effectiveness in terms of educational personalization.
- C) Provide criteria for teachers to fulfill themselves professionally, including ethical review.

The questionnaire should be completed in order to compare with interviews, exercise interpretations, meetings, discussion groups, etc.

Linked to the aforementioned transversality, it would be convenient for teachers to know the epistemology of interdisciplinarity, especially transdisciplinarity, by referring it to the values surrounding freedom in the exercise of teaching: lessons, tutoring, peer interactions.

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Strategy in Suriname How do organizations in Suriname Strategize?

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ABSTRACT

Purpose – There are few textbooks available on strategic management based on non-Western practices. This might be a consequence of the lack of studies on strategic management in these countries. The purpose of this article is to describe how organizations in Suriname strategize. **Methodology** – For this study a brief literature review was conducted, a survey was held and the results were discussed with faculty and students of Anton de Kom, University of Suriname. **Findings** – Organizations in Suriname do strategize. The economy is the most important factor organizations take into account. The factor that is taken least into account is the ecology. Other factors that are important are social. The multicultural society is taken into account. The political factors, surprisingly, score relatively low. **Originality** – The paper contributes to the understanding of strategizing by Suriname's organization and other Caribbean Small Island Developing States (SIDS). **Conclusions** – Organizations in Suriname do strategize. The economy is the most important factor organizations take into account. The factor that is taken least into account is the ecology.

Key words: Suriname, SIDS, Strategy, PESTLE, Competitive Advantage Business-level strategies

INTRODUCTION

Suriname is a Small Island Development State (SIDS) that obtained its independence from the Netherlands in 1975. Its territory is 165,000 square kilometers, and the population is 560,000. It is part of the smallest country in South America and is located on the North coast. Suriname is the only Dutch speaking member of the Caribbean Community (CARICOM), since 1995.

Suriname has a market economy and has not performed too well economically the last couple of years, despite the fact that this multicultural country might be one of the richest countries in the world based on the availability of natural resources (Schmeitz, 2018). Suriname began as an agricultural economy and became an economy dominated by mining, mainly bauxite (starting around 1916), and now also gold and from the 1980s oil (Hout, 2014). Suriname has a

large informal economy, estimated between 35% and 45% (Peters, 2017) and a sizeable public sector. Its infrastructure has improved through the years. There is no robust private sector.

... Suriname failed to develop a robust private sector. The economy has produced no large private-sector companies, and of those small- and medium-sized businesses that do exist, many are limited to selling goods and services to the government and importing products for the general population not produced locally. When government finances were cut over the past two years, the pain quickly rippled into the private sector. The combination of these factors resulted in a state-dominated economy that was unable to respond quickly to changing market conditions. (MacDonald, 2018)

The relative importance of agriculture in Suriname's economy has declined over the last two decades. Meanwhile, as agricultural output fluctuated, the country's economic growth was boosted by development in the mining and services sectors. However, agriculture is still socio-economically significant, as it is a major provider of employment in rural areas, accounts for 5% of the country's foreign exchange earnings, and is a key contributor to food security through the production of rice, the population's main staple food. (Derlagen, Tas, Boyce, Shik, & De Salvo, 2017)

The economy is highly dependent on the export of commodities. The gains of the boom (2001-2014) are gone. The country is going through a recession (MacDonald, 2018).¹

Suriname's economy is dominated by the mining industry, with exports of oil and gold accounting for approximately 85% of exports and 27% of government revenues. This makes the economy highly vulnerable to mineral price volatility.²

Students are taught business and management at the university level using Western books, mainly American publications. This is, among other factors, a result of a lack of local research and literature. There is some research, however: A study from 1995 describes how small and medium agriculture and handicraft enterprises cope (Roseval, 1995). That is why we researched how Surinamese organizations consider and implement strategy.

For the purpose of this study we define strategy as the direction and scope of an organization for the long-term, which achieves advantage for the organization through its configuration of resources within a challenging environment, to meet the needs of markets and to fulfill stakeholders' expectations. In other words, strategy is about:

- Direction: Where is the business aiming to get to in the long-term?
- Markets: Which markets should an organization compete in and what kinds of activities take place in such markets?
- Advantage: How can the organization perform better than the competition in those markets?
- Resources: What resources (skills, assets, finance, relationships, technical competence and facilities) are required in order to be able to compete?
- Environment: What external factors affect the business's ability to compete?
- Stakeholders: What are the values and expectations of those who have power in and around the business? (What is strategy, 2018)

¹ Suriname Economy Profile 2018. (2018). *Indexmundi.com*. Retrieved 1 June 2018, from https://www.indexmundi.com/suriname/economy_profile.html

² https://www.indexmundi.com/suriname/economy_overview.html

METHODOLOGY

The authors have followed a data triangulation strategy to seek data validation based on the cross-verification of the analyzed data sources. For this study, a literature review was conducted. Descriptive statistics were applied. A questionnaire was developed and distributed. In this article we looked into the different factors that influence organizations in Suriname when developing their organization strategies.

One hundred seventy managers and directors from 170 diverse organizations participated in a convenience sample. There was no limitation by size, age or the sector the organization operates in to participate in the survey. The only criteria were that the business has to be fully operational in Suriname and that the respondents had to have a managerial or executive position in which they contribute to shaping the strategy of their organization. The survey was conducted in March 2018. The survey was based on the following variables: age of the organization, size, sector in which the organization operates, if the organization has a mission and a vision statement, if there is a strategic plan, how far ahead the organization plans, if the strategy is internationally oriented, the importance of the PESTLE factors (Political, Economic, Sociological, Technological, Legal, and Environmental), and the strategy of the organization.

This article answers the following questions about how organizations in Suriname strategize:

1. Does size of the organization determine whether or not strategic planning is used by management?
2. Does the age of the organization influence the strategy?
3. Does the category of the organization determine if strategic planning is used by management?
4. To what extent do macro environmental factors influence the strategy of a business?
5. How many organizations per category are applying Competitive Advantage Business-level strategy options?

LITERATURE REVIEW

Strategy is an expression of how an organization needs to adapt over time to meet its aims, after a thorough assessment of the external environment. Developing an organizational strategy for an organization involves first comparing its present state to its desired state to establish the differences and then stating what is required for the desired changes to take place (Porter, 2018).

The strategy of an organization is dynamic and is for the longer term. The influence of external (risk) factors on the strategy varies per sector, age and size of the organization.

When an organization has identified both internal and external influences, it must respond quickly to them and make necessary changes in its strategy to remain competitive. This analysis also provides the opportunity to discover trends.

The field of strategy looks like a jungle to many people. Mintzberg et al. (1998) went on a safari and mapped this jungle. They stated that there are at least ten schools.

School of design

Views strategy development as a process of realization, achieving a fit between the organization's internal abilities and external possibilities. The SWOT Analysis is often used here.

School of planning

Praises the advantages of formal strategic planning to a great extent and arms itself with formal procedures, training, analysis and lots of numbers. Inspired by Igor Ansoff among others.

School of positioning

This school is heavily influenced by Michael Porter's assertion that strategy is dependent on the way the company is positioned in the market and the industry. Typically views strategy development as an analytical process, where you have to choose the right strategy among a limited amount of generic types.

School of entrepreneurship

Emphasizes the manager or leader's central role as the one who creates the strategy and carries the vision. This means that the strategy is flexible and can be adapted to the leader's experiences.

The cognitive school

Examines what happens in the mind of the strategist and sees strategy as a mental process, where there is room for creative interpretations. Strategists, of course, have different cognitive styles, for instance extrovert or introvert, thinking or feeling.

School of learning

Views strategy as an emergent process. This means that strategies occur as people gain more knowledge of a situation and of the organization's ability to handle it. This way, the formulation and implementation are intertwined.

School of power

Considers strategy a result of different power plays both inside and outside the organization. Negotiation is a central element of the power school.

School of culture

Strategy creation is viewed as a process that is rooted in the social power of the culture. It focuses on common interests and integration.

School of surroundings

Focuses on the powers that surround the organization. A company's strategy depends on events occurring in the surroundings and the organization's reaction to them.

School of configuration

Views strategy as a process that transforms the organization. This school describes a strategy's relative stability that is interrupted by occasional dramatic leaps to new stages.³

PESTLE is an acronym for a method used to identify the macro (external) forces influencing an organization. The letters stand for Political, Economic, Social, Technological, Ecology (Environmental) and Legal (Oxford, 2018). In the following paragraphs these factors are discussed further.

³ <https://lederindsigt.dk/en/tools-templates/strategy-business-development/henry-mintzberg-s-10-schools-of-strategy>

Political factors. When analyzing the political factors, we are analyzing the way in which politics impacts an organization's strategy. Some of the ways in which politics influences an organization are: stability of the government, government policy and elections, level of corruption, especially the ruling parties, trends in the regulations. It concerns all political actions at administrative, district, regional and international levels (Contributor, 2018). The political factors can influence the other factors in the PESTLE analysis because lawmakers can create laws on all these factors. Therefore, it is almost impossible to consider political factors without including the other factors of the PESTLE in the decision making (Yüksel, 2012).

Economic factors. Economic factors include interest rates, inflation figures, economic growth forecasts, unemployment level, labor costs, productivity and fiscal policies. Economic factors have an influence on entrepreneurial activity (Castaño, Méndez, & Galindo, 2015).

Socio-cultural factors. The impact of socio-cultural factors on an organization's strategy is an understudied field (Thornton, 2011). Thornton and colleagues' research on the relationship between entrepreneurial activity and socio-cultural factors proves that socio-cultural factors could influence decisions when creating new businesses. Castaño's (2015) study on the effect of social, cultural, and economic factors on entrepreneurship indicates the following: Adequate social structures foster entrepreneurship. Summarizing, in countries where the rule of law is more advanced and individuals have high economic freedom, extensive entrepreneurial activity is more common. Societies with less corruption and better training and education have higher levels of entrepreneurial activity (Yüksel, 2012).

Technological factors. Technology has become a vital part of every organization today, as most of the operations are Internet-based and technology-driven. Therefore the importance of the technology environment is critical (Bughin et al., 2011).

There are two types of technological change: there are developments in ICT and there are developments in technology specific to an industry or market, for example enhancements to manufacturing technology. ICT developments can instigate profound business impacts, often across industries or business domains and on a series of organizations. These are the so-called distributive technologies. It is often the case that there is a failure to recognize the potential use of the technology – at least until a competitor emerges with a new or enhanced offering. For example, increased functionality of mobile technology or extended bandwidth for Internet transactions can present opportunities to many organizations (Cadle, Paul, & Turner, 2010). Other disruptive technologies are blockchain, robotics and nano technology.⁴

Legal factors. Legal factors are external factors which refer to how legislation affects the way businesses operate and customers behave. Legal factors are the factors that affect businesses as a consequence of government regulations. They play a big part in regulating how organizations operate, what taxes they pay and what profits they receive, as well as how customers behave. Examples include the laws regulating importation and exportation. There is always an interrelationship between legal, political and economic factors (Yüksel, 2012).

Ecological or environmental factors. Environmental factors include infrastructure, cyclical weather, disposal of materials, energy availability and cost, and the ecological consequences of

⁴ *These 5 disruptive technologies are driving the circular economy.* (2018). *World Economic Forum*. Retrieved 16 May 2018, from <https://www.weforum.org/agenda/2017/09/new-tech-sustainable-circular-economy/>

production processes. In Suriname, there is the environmental law and the “Nationaal Instituut voor Milieu en Ontwikkeling in Suriname” (NIMOS) that has set terms which organizations in different sectors must comply with.

THE MODEL OF GENERIC STRATEGIES FOR COMPETITIVE ADVANTAGE BUSINESS-LEVEL STRATEGIES

Using a PESTLE analysis in order to analyze external factors is one of the first steps when strategizing. Analyzing the potential impact on the organization is the next step. It is important that the results are constantly tested and adapted to the actual situation of organization.

Porter introduced the Model of Generic Strategies for Competitive Advantage Business-level strategies. According to Porter an organization’s core competencies should be focused on satisfying customer needs or preferences in order to achieve above average returns. This is done through Business-level strategies. Business-level strategy is all about an organizations’ position in an industry compared to competitors and to the five forces of competition (Supplier power, Buyer power, Competitive rivalry, Threat of substitution, Threat of new entry). There are four business strategies: Cost Leadership, Differentiation, Cost Focus and Differentiation Focus.

Scope	Broad	Cost Leadership	Differentiation
	Narrow	Cost Focus	Differentiation Focus
		Cost	Differentiation
Source of Competitive Advantage			

Figure 1: The Model of Generic Strategies for Competitive Advantage Business-level strategies

Cost Leadership

The objective is to become the lowest-cost producer in the industry.

The classic method to achieve this objective is to produce on a large scale, which enables the business to exploit economies of scale.

Why is cost leadership potentially so important? Many market segments in the industry are supplied with the emphasis placed on minimizing costs. If the achieved selling price can at least equal (or near) the average for the market, then the lowest-cost producer will enjoy the best profits.

This strategy is usually associated with large-scale businesses offering standard products with relatively little differentiation that are readily acceptable to the majority of customers. Occasionally, a low-cost leader will also discount its product to maximize sales, particularly if it

has a significant cost advantage over the competition and, in doing so, it can further increase its market share.

A strategy of cost leadership requires close cooperation between all the functional areas of a business. To be the lowest-cost producer, a firm is likely to achieve or use several of the following strategies:

- High levels of productivity
- High capacity utilization
- Use of bargaining power to negotiate the lowest prices for production inputs
- Lean production methods (e.g., JIT)
- Effective use of technology in the production process
- Access to the most effective distribution channels

Differentiation Leadership

With differentiation leadership, the organization targets much larger markets and aims to achieve competitive advantage through differentiation across the whole of an industry.

This strategy involves selecting one or more criteria used by buyers in a market and then positioning the business uniquely to meet those criteria. This strategy is usually associated with charging a premium price for the product or service, often to reflect the higher production costs and extra value-added features provided for the consumer.

Differentiation is about charging a premium price that more than covers the additional production costs and giving customers clear reasons to prefer the product over other, less differentiated products.

This is achieved in several ways:

- Superior product quality (features, benefits, durability, reliability)
- Branding (strong customer recognition and desire, brand loyalty)
- Industry-wide distribution across all major channels (i.e., the product or brand is an essential item to be stocked by retailers)
- Consistent promotional support – often dominated by advertising, sponsorship, etc.

Good examples of a differentiation leadership include global brands like Apple and Mercedes. These brands achieve significant economies of scale, but they do not rely on a cost leadership strategy to compete. Their business and brands are built on persuading customers to become brand loyal and paying a premium for their products.

Cost Focus

With cost focus an organization seeks a lower-cost advantage in just one or a small number of market segments. The product is basic or simple and perhaps similar to the higher-priced product offered by the market leader, but acceptable to sufficient consumers.

Differentiation Focus

This is the niche marketing strategy. In the differentiation focus strategy, an organization aims to differentiate within just one or a small number of target market segments. The special customer needs of the segment mean that there are opportunities to provide products that are clearly different from those of competitors who may be targeting a broader group of customers.

The important issue for any business applying this strategy is to ensure that customers really do have different needs and wants—in other words that there is a valid basis for differentiation—and that existing competitor products are not meeting those needs and wants.

Many small organizations are able to establish themselves in a niche market segment using this strategy, achieving higher prices than un-differentiated products through specialist expertise or other ways to add value for customers.

Caught in the middle strategy

Some firms fail to effectively pursue one of the generic strategies. A firm is said to be stuck in the middle if it does not offer features that are unique enough to convince customers to buy its offerings, and its prices are too high to compete effectively based on price.

RESULTS

How do organizations in Suriname actually plan? Between the 5th and the 18th of March 2018, 170 organizations participated in the survey.

Some 17.4% of the organizations are younger than five years, 17.4% are between 6 and 10 years, 19.8% are between 11 and 20 years, and 45.5% are older than 21 years. Organizations older than 21 years are most represented in this survey. The second most represented organizations are the organizations between 11 and 20 years. The younger organizations, both younger than five years and between six and 10 years, are almost evenly represented in this survey. The total of all organizations is 100%.

Some 23.2% of the organizations are large (>250 employees), 17.3% are middle (<250 employees), 25.00% are small (<50 employees), and 34.5% are micro (<10 employees).

The organizations operate in the sectors indicated in Table 1.

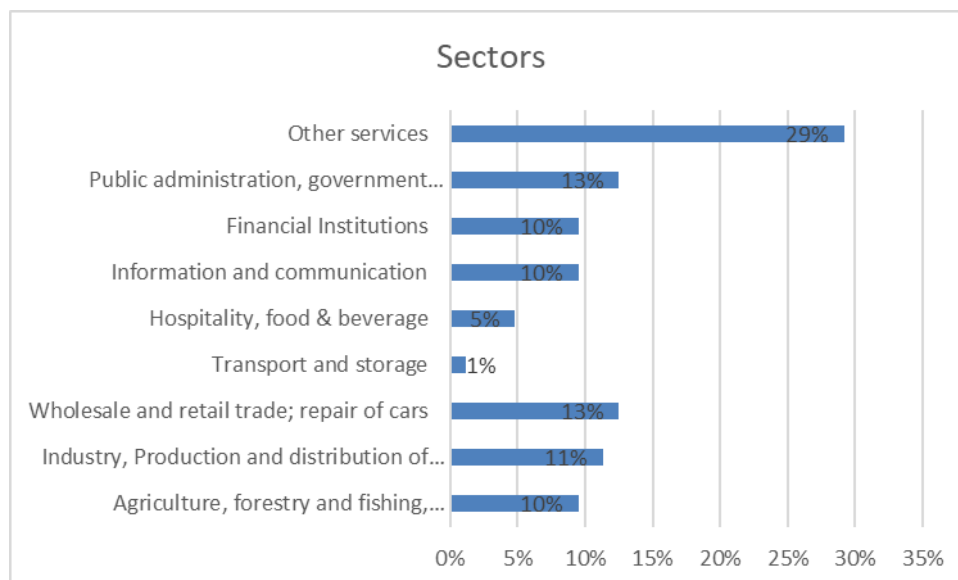


Figure 2: Sectors of organizations

Although this is a convenience sample, the relatively big size of sectors is no coincidence: Big public sector, big industry and agriculture sector. There is no clear explanation why 29% indicated operating in sector “Other services”.

MISSION AND VISION STATEMENT

Eighty-five percent of the surveyed organizations have a mission and vision statement. The sector with most organizations with a mission and vision statement is the sector "Other services" with 29%, followed by sector "Public Administration etc." with 12.5%. The third place goes to sector "Information and communication" with 9.5% having a mission and vision statement.

Some 45.5% of organizations are older than 21 years and 88.2% of these organizations have a mission and vision statement.

Strategic plan

Some 85.8% have a strategic plan of which 63.9% is a written strategic plan. Some 43% of the organizations that have a written strategic plan have prepared it for five years. Most of the big organizations (92%) and middle organizations (91%) in Suriname have a written strategic plan, while only 61% of the small organizations and 36% of the micro organizations write their strategy down.

Organizations older than 21 years have a written strategic plan (75%), followed by organizations between 11 and 20 years (69%). It is noticeable that the percentage for organizations between 6 and 10 years and younger than 5 years who don't have a written strategic plan is relatively high.

The category "Other Services" has the highest score for having a (written) strategic plan (21%). Sector "Public Administration ..." is the second sector (12%). 79% of the strategic plans in this sector are written. The sectors with the least representation with regard to written strategic plans are sector "Wholesale" (4%), followed by sector "Hospitality" (2%) and sector "Information and Communication" (1%).

Planning

Seventy percent of the organizations plan ahead. Thirty percent do not plan; 55.4% plan five years ahead, 9% plan 10 years ahead, and 4.8% plan 20 or more years ahead.

Internationally oriented

Another question during the survey was related to whether the organization is internationally oriented or not. Seventy-three percent of organizations have stated that their strategy is international oriented. Of the organizations that have a strategy that is internationally oriented, 27% are big organizations and 26% are small organizations.

PESTLE

Different factors influence the organizations' strategies. In this section the factors that influence the strategy are discussed. The factors which are discussed are politics, economy, technology, legal and ecology (PESTLE).

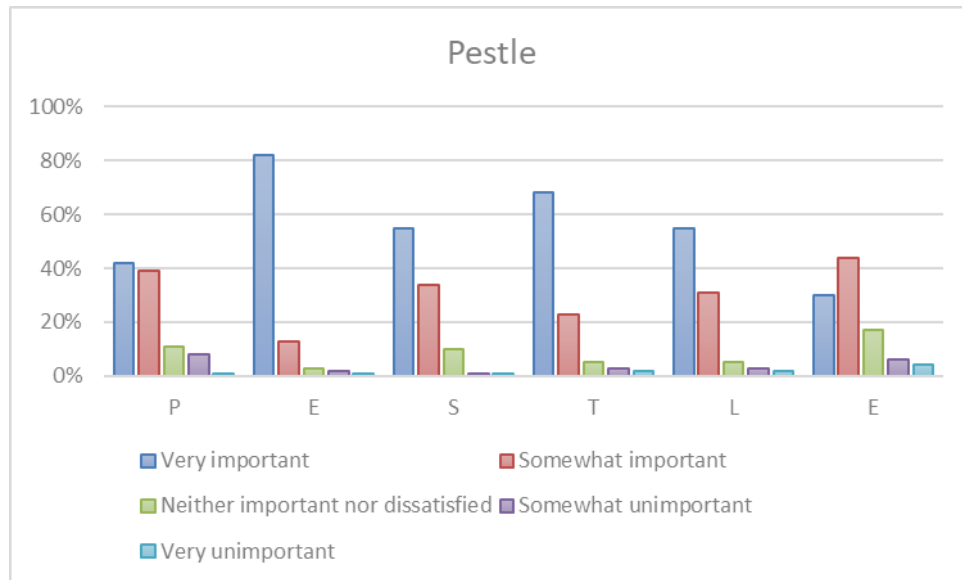


Figure 3: How important are the PESTLE factors?

Eighty-two percent of the surveyed organizations consider that the economy has significant influence on its strategy. Sixty-eight percent of the organizations consider the influence of technology significant technology, followed by the social factors (55%) and legal factors (55%). Respectively, 42% and 30% of the surveyed organizations find political and ecological factor very important to their strategy.

It is noticeable that the economy is the most important factor when crafting the strategy in Suriname. It is also noticeable that the factor ecology is the least important, given the fact that the environment is essential for the survival of humankind.

Political

Most organizations, regardless of age, think that the political factor in Suriname is very important to fairly important (80.4%, 41.7% plus 38.7%). Only two organizations do not think it is important.

Regardless of the size of the organization, politics is considered important in formulating strategy. Most organizations between 0 and 10 years find the political factor in strategy somewhat important in comparison with organizations older than 10 years. Organizations over 10 years find political factor in strategy formulation very important.

As an organization ages, they realize that political factors play a very important role in strategy formulation. In a small country such as Suriname it is understandable that politics exert relatively a large influence on organizations.

Economics

Eighty-two percent of the surveyed organizations find that the economy has a very important influence on their strategy. This is by far the most important factor to consider when strategizing in Suriname.

Social

Fifty-five percent of organizations assume that social factors are very important in strategy formulation in Suriname. Regardless of size, age and category or sector, almost every organization takes social factors into account in its strategy formulation. The assumption is that social factors play such a big role in Surinamese organizations because Suriname has a

diverse culture, which cannot be ignored. Every culture is different, so organizations must take this into account in their strategy formulation. Apart from that, there are other general social factors that must be taken into account, such as the spending pattern of consumers that looks different now in the bad economic situation; most people in families have more than one job, etc.

Technology

Most organizations (68%) find the technological factor very important in strategy formulation in Surinamese organizations. This is important in all age categories, regardless of the size of the organization. Technology is an important factor that is taken into account. Most organizations are aware that keeping up with technology has an impact on their competitiveness, effectiveness and efficiency. It also contributes to the innovation of the business processes and the development of new products and services and business models. In most organizations in Suriname it is noticeable that adaptation of innovation, especially in the area of social media, is constantly increasing. This factor plays an important role in determining which type of business level strategy an organization will apply.

Legal

Most organizations (55%) find legal framework in their strategy very important. The legal factors become more important as the organization gets older and bigger. It is necessary that organizations grow more aware of the laws and regulations that are in place in Suriname. Also, when they are entering into foreign markets, regulations are important to take into account.

Ecology or environmental

Only 26.6% find the ecological factors very important in formulating their strategy. Some 43.8% find the ecological factors somewhat important in strategy formulation. Organizations are not yet aware enough of their corporate responsibility concerning the environment; they do not yet see the long-term consequences of neglecting these factors. There is not enough pressure from the civil society on the organizations to take these factors into consideration when strategizing. It is noteworthy that there are exceptions; some organizations are already using green strategies.

There is no relation between the age of an organization and taking the ecology factor into account when establishing a strategy. We did not expect this outcome; we thought that the organizations younger than ten years established a plan for protection of the environment.

COMPETITIVE ADVANTAGE BUSINESS-LEVEL STRATEGIES

While strategy is important to organizations, these strategies could be presented in various options.

Most of the organizations apply differentiation leadership (33%) as a strategy option, followed by cost leadership (28%). Twenty-one percent of the surveyed organizations use differentiation focus as an option and fewer of the organizations use cost focus (7%) or other strategies (11%).



Figure 4: Competitive Advantage Business-level strategies

It's very noticeable that the micro organizations have the highest counts in all strategies. The big organizations have the highest percentages when it comes to the "other" strategies, which were not mentioned as an answer option in the survey. However, the majority of organizations are applying product/service differentiation strategy. They offer a product or service that is in high demand, but with unique characteristics. On the other hand, the minority of organizations focus on the cost (7%). They offer a product or service in a niche market, and they ensure the lowest possible price.

Out of the 33% applying differentiation, 9% are in the sector "Other Services", which is the highest score for this strategy option. Out of the 28% using cost leadership, 7% are in to category "Other Services" and another 7% in the category "Wholesale & Retail". Out of the 21% using differentiation focus, 8% are in sector "Other Services".

The following can be concluded regarding the business level strategies related to size: 33% of organizations use the differentiation strategy, whereas 29% belong to the micro organization and 25.5% belong to the big category; 28.2% organizations use the cost leadership strategy and most of them are the micro organizations.

Organizations older than 21 years use the differentiation strategy the most and next the cost leadership strategy.

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The results of this study were analyzed and discussed. This has led to a few overall conclusions that are solely based on and limited to the survey.

The bigger organizations are usually older than 21 years. It is also evident that the older the organization, the greater the chance that they have a strategic plan in place. These older organizations ascribe more value to a strategic plan compared to the younger and less mature organizations. This conclusion is consistent with the findings of Mintzberg (1979), the icon of the contingency theory, who states, "The older the organization, the more elaborate its structures." Along this line of reasoning one might state: the older the organization, the more formalized its process of developing the strategy.

There is some indication that the political, legal and economic factors are interrelated. In the past four years in Suriname the political environment has been very unstable and as a result the economy has been shaky as well. This led to numerous strategy changes for organizations.

The Surinamese organizations are aware that the business strategy must be aligned with the social factor of the PESTLE method. This factor considers the social environment of the market and determinants like cultural trends, population analytics, etc., which are very important in Suriname, with the different population groups and associated cultures, for doing business.

Five of the six PESTLE factors are considered to be very important to the strategies of the surveyed organizations. One, the ecology factor, is deemed to be of lesser importance to sectors other than agricultural and mining.

When asked to specify which option best describes their strategy, a large number of organizations stated differentiation.

Does size of the organization determine whether or not strategic planning is being used by management?

The size of the organization does have some influence on whether or not they have a strategic plan. The size does matter, because 58% of the organizations that have a strategy contain at least 50 personnel and more. The size of the organization is relevant to the strategy. Most of the big and middle organizations do have a written strategic plan, while only 61% of the small and 36% of the micro organizations have a written strategic plan.

Does the age of the organization influence the strategy?

With reference to the analysis we can conclude that the age of the organization does have an influence. Most respondents from an organization with a higher age say that they have a strategy plan that is 45.5%.

We also see that 63.9% of the organizations do have a written strategic plan. The organizations that do have a written plan are older, 44.7% of the total population. The younger the organization, the lower the percentage of the organization with a strategic plan.

We also conclude that the organizations which are younger than five years are more international oriented, followed by organizations between 6 and 10 years old. The organizations reflect the era of globalization in which they were established.

Does category of the organization determine if management is using strategic planning? There is no definite answer. The sector that has the highest percentage of having a written strategic plan that is internationally oriented is the sector "Other Services", and the lowest percentages are in the sector "Hospitality, Food & Beverage".

To what extent do macro environmental factors influence the strategy of a business? Eighty-one percent of the organizations find that the economy has an important influence on their strategies.

If we consider the six factors—politics, economy, social context, technology, legal framework and ecology—we can conclude (according to the results) that economy is the most influential factor according to all the respondents (if we look at the different sizes of the organizations),

followed by technology and legal framework. Micro sized organizations are the organizations that deal with these factors the most.

How many organizations per category are applying Competitive Advantage Business-level strategy option? Of the respondents who have a written strategic plan: 30% has a differentiation strategy, 18% have a differentiation focus strategy, 6% have a cost focus strategy and 23% have a cost leadership strategy. It is recommended that micro and small organizations write their strategic plan. Most other organizations have a strategy plan, but not in writing. Further, organizations should consider the technology factors that have great influence on the strategy of the organization. More organizations should be internationally oriented and plan ahead, and every organization should have a mission and a vision statement. Sustainable development should be high on the agenda of the organization.

The findings of this research are limited, primarily because the survey is based on a convenience sample. Therefore, generalization of the findings is not possible. Also, because it regards the case of Suriname, it is not compared to other SIDS or other countries. Nonetheless, it is an interesting first step for further research on strategy development by organizations in Caribbean SIDS. We recommend the following:

A comparative study between countries like Suriname, British Guyana, French Guyana, Trinidad and Curaçao might provide more insight into this matter of strategizing by organizations in Caribbean Small Island Developing States.

We recommend further research to find out what specific influence the PESTLE factors have on the organization strategy.

We recommend further research to find out why some PESTLE factors are more important than others.

Awareness for the ecological factor is increasing. That is why we recommend more attention to increase awareness for this factor. The government can raise awareness by implementing awareness programs, legislation and regulation.

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Economic Analysis Of The Effects Of Natural Tenderizer (PAPAIN) On Meat Quality Of Spent Layers

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ABSTRACT

The study was carried out to determine the tenderization effect of papain on spent layers meat. A total of 15 spent layers were randomly assigned into five treatments of 3 replicates in a completely randomized design. The spent layers breast and thigh meat were soaked in different concentration of 0.00%, 0.25%, 0.50%, 0.75% and 1.00% of papain represented as T₁, T₂, T₄ and T₅ respectively for 30 minutes. The physico-chemical and sensory properties were determined. The cooking loss, thermal loss, drip loss and pH increases with increase in inclusion level compared with the control. It was found out that in thermal loss the highest significant differences ($p < 0.05$) was T₅ (30.00) while in cooking loss T₄ (66.85) has the highest value and the highest significant ($p < 0.05$) was T₂ (28.90) and T₅ (23.30) has the lowest for crude protein content compared to control. Result of sensory evaluation indicated the improvement of the sensory qualities of the samples treated with papain especially of tenderness, juiciness, ease of fragmentation and the colour. These results were reflected on the general acceptance by the consumer of the meat. The result revealed that T₂ (5.40) was the best sample which is with 0.25% inclusion level of papain among the treated samples. Significance differences ($p < 0.05$) as far as concentration levels increases were noticed. The papain used in softening the meat attracts little or no cost, adds flavor and nutritive value to meat, which strongly influences the eating quality and acceptability by the consumers and in turn reduces the toughness of the meat and increase the rate of consuming spent layers by human being rather than using them for feeding the pet. Also, tenderization will cause reduction in price and demand for broilers during festivals. The results of the study therefore recommend the use papain at 0.25% inclusion level in tenderizing spent layer meat %. It does not have adverse effect on the physical, chemical and the organoleptic properties of the spent layer meat.

Keywords: papain, myofroibillar proteins, spent layers, meat tenderness.

INTRODUCTION

Poultry refers to all birds of economic value to man. The importance of poultry as a source of ready cash and meat for human consumption is well recognized. FORD (1990) reported that poultry meat production provide profit, generally representing 20% of total meat product consumption of which 17% was chicken. The problem of malnutrition has remained an unresolved global issue for a long time. FAO (1999) asserted that the most critical problem in the global food basket crises is protein especially animal origin. However, Isiaka *et al.*, (2006), postulated that the poultry was strategic in addressing animal protein shortage in human nutrition.

Globally, there are about 2.6 billion of spent hens that are used in the pet food industry and not much for human consumption (Navid *et al.*, 2011). Spent hens is mostly underutilized and are used in low priced mince product at the end of laying cycle and these birds become available for use in further processed product (Nowasad *et al.*, 2000). However, meat obtained from spent layers has poor functional properties, tends to be tough, non-juicy and low in fat (Sighet *et al.*, 2011). Because of unacceptable toughness and brittle bones the use of spent chicken meat has long been a problem for the poultry industry. Ariff (2006) reported that the lack of broiler chickens supply in the market to fulfill consumers demand as well as the tremendous increase in the price of broilers chickens during festival forced many people to opt for spent layers instead of broilers. Furthermore, if meats from spent layers are processed properly they can be good source of nutrients especially protein and amino acids (Nowasad *et al.*, 2000, Fuller, 2004).

Consumers' acceptance of meat is strongly influence by the eating quality. Meat quality is defined as a combination of diverse properties of fresh and processed meat, these properties contain both sensory characteristics and technological aspect such as colour, water holding capacity, cooking losses and texture (Walsh *et al.*, 2010, Kargiotou *et al.*, 2011) of the sensory characteristics, eating quality which consists of flavor, tenderness and juiciness has been regarded as the most critical characteristics because it influence repeat purchase of consumer. Tenderness is considered to be the most important organoleptic characteristics of meat (Lawrie, 1997). The toughness associated with spent chicken meat is primarily due to increased cross linking in the connective tissue of the older animals (Archile Contreras *et al.*, 2011). Spent layers which are being used for meat purpose are going to be discarded by the quality conscious consumer due to inherent quality differences especially tenderness of spent layer meat. Therefore, the farmers are facing a problem in dispersing their old underproductive layers at a minimum price.

Tenderness is influence by the length of sarcomeres, structure integrity of the connective tissue that affects the background toughness (Chen *et al.*, 2006). Several methods have been tested to improve the tenderness of meat by the use of enzymes (Ashie *et al.*, 2002; Wada *et al.*, 2002; Naveena *et al.*, 2004; Pawa *et al.*, 2007), salt, phosphates (Pietrasik *et al.*, 2010), and calcium chloride (Gereit *et al.*, 2000). Moreover, there have been some physical method to tenderize meat such as pressure treatment (Palka 1999), ultrasound (Jayasooriya *et al.*, 2007), electrical stimulation (Claus *et al.*, 2001) and blade tenderization (Pietrasik *et al.*, 2010). Proteolytic enzymes are commonly used in meat tenderization these enzymes can be obtained from plant, bacterial and fungal sources.

There are five exogenous enzymes (papain, bromelain, ficin, *Aspergillus oryzae* protease and *Bacillus subtilis* (bacteria) protease) recognized by united state federal agencies as generally recognized as safe (GRAS) for meat tenderization. Apart from these GRAS enzymes, others have been evaluated including ginger rhizome (Sullivan and Calkins, 2010). However, proteolytic enzymes extracted from plant such as papain, bromelain and ficin have been more commonly used as meat tenderizer in the world (Naveena *et al.*, 2004) because bacteria derived enzymes mainly lead to safety concern (Chen *et al.*, 2006).

Spent layers meat toughness is primarily due to the increased cross linking in the connective tissue of the older animals which affect the consumer acceptance of the meat and the meat are being discarded by quality conscious consumer. Proteolytic enzymes extracted from plants (organic sources) as meat tenderizer are preferable to the conventional synthetic tenderizers available. From ongoing, the study aims at determining the effect of natural tenderizers on meat quality attribute of spent layers meat. Specifically the study was designed to: assess the

physical properties of spent layer meat tenderized with papain, evaluate the chemical property effect of papain on meat quality of spent layers and evaluate the sensory property of spent layers meat tenderized with papain.

Muscle Structure

Skeletal muscle contains a large number of single muscle fibers. The entire skeletal muscle is wrapped by epimysium which is a thin cover of connective tissue extending over the tendon. Each muscle includes several muscles fiber bundles which are wrapped by perimysium, another thin cover of connective tissue .Muscle fiber bundles including a varying number (30 - 80) of individual muscle fibers up to a few centimeters long with a diameter of 50 microns. Each bundle is surrounded by endomysium of the other layer of connective tissue. Muscle fibers contain about 1000 myofibrils which are responsible for muscle contraction and relaxation. Myofibrils are composed of the thin filaments (actin) and thick filaments (myosin) (Toldra, 2002, Heinz and Hautzinger, 2007).

The sarcomere is the smallest contractile unit of a muscle fiber and it is approximately 2.3 μ m long (Toldra, 2002). Sarcomeres are linked end-to-end within the muscle fiber. There are thin and thick filaments within each sarcomere. The filaments are oriented in an overlapping arrangement which result in dark and light bands giving appearance of striations. Myofibrils are connected to the net-like structure cell membrane known as sarcolemma. Muscle fibers are filled with intracellular sarcoplasm (cellular fluid), which is a liquid made up of approximately 80% water as well as proteins, enzymes, lipids, carbohydrates and inorganic constituents (Aberle *et al.*, 2001, Chan 2011).

Muscle Protein Composition

A mammalian skeletal muscle is composed of approximately 75% water, 18-20% protein, 0.5-1% fat, 1% of carbohydrate and 3.5% of other soluble materials (non-protein and non-carbohydrate) (Duke 1943). These percentages may differ, especially in fat content depending on species, amount of fattening and inclusion of adipose tissue.

Muscle proteins have significant roles for the structure, function and integrity of the muscle. Proteins change during the conversion of muscle to meat which affect the tenderness and additional changes occur during further processing through the formation of peptides and free amino acids as a result of the proteolytic enzymatic activity (Toldra and Reig 2006). A typical adult mammalian muscle is approximately composed of 19% proteins. Based on their function in a muscle and solubility in aqueous solvents, proteins are generally categorized into three main groups; myofibrillar, sarcoplasmic and stromal proteins.

Myofibrillar Proteins

Myofibrillar proteins are salt soluble proteins making up about 45-50% of the total proteins they are extracted by salt solutions and require higher ionic strength called salt-soluble proteins. In skeletal muscle myofibrillar proteins can be classified into three main groups. (i) Contractile proteins (myosin and actin). (ii) Regulatory proteins (Tropomyosin and Troponin). (iii) Cytoskeletal Proteins (titin, nebulin, C-protein and M- protein. Myosin is the main protein of the thick filament having a rod shape. Each myosin has a tail and two globular heads. (Aberle *et al.*, 2001)

Sarcoplasmic Proteins

Sarcoplasmic proteins are water soluble proteins extracted in aqueous solution with low ionic strength (0.15 or less) (Aberle *et al.*, 2001). They contain metabolic enzymes (mitochondrial, Lysosomal, microsomal, nucleus of free in the cytosol), hemoglobin, myoglobin and

cytochromes (Toldra 2002, Wang 2006). Some of these enzymes have important activity in post mortem meat and during further processing. The main sarcoplasmic protein is myoglobin which is responsible for the red meat colour, the amount of myoglobin depends on the fiber type, age of animal and animal species. For example, beef and lamb meat include more myoglobin than pork and poultry. In general, the amount of myoglobin increases with the age of the animal (Toldra and Reig, 2006).

Stromal Proteins

Stromal proteins are water and salt insoluble proteins which include proteins of connective tissues which are very fibrous and insoluble proteins comprising about 10-15% of the total protein in the skeletal muscle (Aberle *et al.*, 2001). The main components of stromal proteins are collagen reticulin and elastin (Toldra and Reig, 2006). Stromal proteins predominantly contain collagen providing strength and support to the muscle structure (Toldra, 2002). The skeletal muscles become tougher with age because the number of crosslinks increases in the collagen fiber, this is the reason why meat tenderness decreases in older animals. (Toldra and Reig, 2006). There are two kinds of connective tissue proteins which are called as proper and supportive. The connective tissue layers, epimysium, perimysium and endomysium are known as connective tissue proper (Alvarado and Owens, 2006). Supportive connective tissue provides structural support because it contains bones and cartilages. Elastin is found in lower level generally in capillaries, tendons, nerves and ligaments (Toldra and Reig, 2006).

Muscle Fiber Types

There are many factors affecting fiber type composition such as species, muscle types (Klont *et al.*, 1998), gender (Ozawa *et al.*, 2000), age (Candek-potokar *et al.*, 1998), breed (Ryu *et al.*, 2008), hormone (Florini *et al.*, 1996), and physical activities (Jurie *et al.*, 1999). Fiber types can be differentiated depending on their appearance (red and white), physiological behavior (speed of contraction), biochemical properties (myoglobin content) and histochemical staining properties (glycolytic or oxidative) (Pearson and young 1989). In order to describe the characteristics of muscle and determine various muscle fibers, histochemical staining can be used (Morita *et al.*, 2000 and Ozawa *et al.*, 2000).

Meat Tenderness

Tenderness is one of the most discussed features in meat and the most important organoleptic characteristics of meat (Lawrie, 1997). It is a real challenge for the scientific economy and for the meat industry to achieve product with standardize and guaranteed tenderness, since these characteristics is exactly what the consumers want in meat product (Koohmararie, 1995). The meat industry has identified the problem of inconsistent meat tenderness as a top priority. This requires a detailed understanding of process that affect meat tenderness and perhaps more importantly, the utilization of such information by the meat industry (koohmararie, 1996). Tenderness has been linked to several factors such as, animal age, sex or muscle location and also influenced by the length of sarcomeres, structure integrity of the connective tissue that affect the background toughness.

METHODS OF MEAT TENDERIZATION

There are different methods of tenderizing meats such as physical or mechanical method, chemical method and enzymatic method.

Physical Method

There have been some physical methods to tenderize meat such as pressure treatment (Palka, 1999), ultrasound (Jayasooriya *et al.*, 2007), electrical stimulation (Claus *et al.*, 2001) and blade tenderization (Pietrasik *et al.*, 2010). There are two major types of physical meat

tenderization method utilized by the meat industry which are; (1) needle or blade tenderization (2) cubing or maceration (Davis *et al.*, 1975). Meat tenderness is also improved mechanically during processes such as injection and tumbling (Pietrasik and Shaid 2004). However, for these processes mechanical improvement in tenderness is secondary to moisture or flavor addition. Other forms of mechanical tenderization have not been implemented due to cost or lack of effectiveness. (Schilling *et al.*, 2003).

Chemical Method

There are many chemical ways to improve tenderness of tough meat such as the use of calcium chloride (Gereit *et al.*, 2000), vitamin D supplementation (Gereit *et al.*, 2000) and the use of phosphates salts (Pietrasik *et al.*, 2010). The use of calcium chloride has also gained prominence in reducing toughness in beef and chicken carcass, the tenderization effect of calcium chloride has been attributed to the activation of calpain (the calcium ion) dependent protease involved in ageing of meat (Koochmaraie, 1994) and also to the increase in the intracellular ionic strength including protein solubilization (Takahashi, 1992)

Enzymatic Method

In addition to the physical and chemical methods of tenderizing meat, treatment by enzymes is a popular method for meat tenderization. Proteolytic enzymes derived from plants such as papain, bromelain and ficin have been widely used as meat tenderizers in most parts of the world (Naveena *et al.*, 2004). Proteolytic plant enzymes are superior to bacteria derived enzymes mainly because of safety problems such as pathogenicity or other disadvantageous effects (Chen *et al.*, 2006).

ENZYMES USED IN MEAT TENDERIZATION

Papain

Papain is extracted from latex of *Carica papaya* fruits, papain a cysteine hydrolase, is highly stable and active under a wide range condition (Cohen *et al.*, 1986). Due to its proteolytic property, it is extensively used in food industry to tenderize meat and as an ingredient in flour and in beer manufacturing (Khanna and Panda, 2007). Papain also have an antifungal, antibacterial, and anti-inflammatory properties (Chukwuemeka and Anthoni, 2010). Vo and Huynh (2009) reported that the activity of papain is strongly affected by type of substrate, the ratio of enzyme to substrate, pH, temperature and period of hydrolyzing process. For instance, optimum pH casein was found to be 7-7.5 and 4.5-7.1 for albumin (Duc Luong Nguyen, 2004). Vo and Huynh (2009) conducted a study on protein of pangasiandon hypothalamus; using the kunitz method (1947) to determine enzyme activity. This method uses orthophthaldehyde to measure the amount yielded amino acid. It was reported that optimum pH was 6.0 and optimum temperature was 55°C for papain. The enzyme had very low activity at pH 4 and 10 and at temperature 4 and 95°C. In two other studies, Khaparde and Sigal (2001) reported that papain had optimum of 6.0 and temperature at 70°C, while Katsaros *et al.*, (2009) reported that 95% inactivation of papain was achieved at 900Mpa and 80°C after 22 min of processing. White and White (1997) gave some specific information on papain molecular weight: 23000Da, optimal pH: 6.0-7.0, isoelectric point 8.75, stable pH: 6-7.5 (White and White, 1997)

Bromelain

There are two different bromelains extracted from pineapple plant (*Ananas comosus*), stem and fruit bromelains. Fruit bromelain is not commercially available. Bromelain is composed of cysteine proteases and non- proteases component (Rowan *et al.*, 1990, Larocca *et al.*, 2010). This proteolytic enzyme is mainly used for meat tenderization (Kolle *et al.*, 2004). It is also used as a nutritional additive to assist digestive health and anti-inflammatory (Wen *et al.*, 2006), anti-edemateous (Seitzer, 1964), absorption facilitator of anti-biotic drugs (Neubaver,

1961), an anti- thrombotic (Metzig *et al.*, 1999) and an immunogenic agent (Hale *et al.*, 2002). The preferential cleavages of bromelain are lysine, alanine, tyrosine and glycine.

As with many other enzymes, bromelain activity depends on some intrinsic and extrinsic factors. Among those are, temperature and pH significantly affect bromelain activity (Corzo *et al.*, 2012) conducted a study characterizing the proteolytic activity of fruit bromelain using five different substrates; azocasein and azoalbumin (pH 3-10 at 20-70°C), casein and sodium caseinate (pH 2-10 at 20-70°C) and hemoglobin (pH 2-6.5 at 30-60°C). In this study, fruit bromelain had its optimum activity at pH 7.5 for azoalbumin and at 6.5 for azocasein, at 55°C for azoalbumin and at 50°C for azocasein.

In the other studies, Yoshioka *et al.*, (1991) found that commercial bromelain from pineapple stem was completely inactivated by heating for 30mins at 60°C, while Gupta *et al.*, (2007) indicated that bromelain lost 50% of its activity by heating for 20min at 60°C. Liang *et al.*, (1999) reported that bromelain from pineapple fruit juice concentrate lost 50% of its initial activity by heating 60min at 60°C. Juramongkan and Charoenrein (2010) studied the effect incubation on temperature on fruit bromelain activity on 40, 50, 60 and 80°C using casein as a substrate. They indicated that there was no fruit bromelain activity loss for up to 60 min at 40°C while at 50°C almost 83% of activity remained. They also reported that bromelain from pineapple juice or fruit is more stable when encountering heating than commercial bromelain obtained from pineapple stem.

Ficin

Ficin represents to the endoproteolytic enzymes from trees of the genus *Ficus*. The ficin that have been isolated from the latex of *Ficus glabrata* and *Ficus carica* are the most widely studied ficins. However, recently a less known ficin from the latex of *Ficus racemosa* has been identified with a molecular weight of 44500 optima pH between 4.5 and 6.5 and maximum activity at 60 ± 0.5 °C. These unique properties make it distinct from other known ficins and give it application in many sectors (Deveraj *et al.*, 2008).

Ginger Rhizome

Ginger rhizome is a source of plant proteolytic enzymes. The ginger protease show optimum activity at 60°C and rapid denaturation at 70°C. Its proteolytic activity on collagen was greater than it was in actomyosin (Thompson *et al.*, 1973; Naveena and Mendiratta, 2004). It has been reported that ginger extract has anti oxidant and anti microbial characteristics as well as its tenderizing properties (Kim and Lee, 1995; Mendiratta *et al.*, 2000).

Several examples of proteases (plant, bacteria and fungal) application in meat product can be found in the literature. Sullivan and Calkins (2010) studied the tenderization effect of five GRAS enzymes (papain, bromelain, ficin, *Bacillus subtilis* protease, two variations of *Aspergillus oryzae* protease which are *Aspergillus oryzae* concentrates and *Aspergillus oryzae* 400) and homogenized fresh ginger on beef muscle. All enzymes except ginger extract displayed a considerable tenderization effect but the lowest shear forces were obtained from the meat treated by papain. Bromelain degraded collagen more than the contractile proteins. Ginger shows tenderized effect but higher levels of ginger result in flavor issues.

Spent Layers

Layers can supply eggs for two to three years before been regarded as spent layers but a depression of egg prices shortens this time (Li, 2006). At the end of egg laying cycle (usually at 85 to 100 weeks) these birds become available for use in further processed. Age makes spent layers muscle to be objectionable tough and this is because of high amounts of heat stable

collagen (Nowasad *et al.*, 2000). An increase in collagen cross linking in the connective tissue of older animal also contribute to its meat toughness (Swatland 1984). This toughness has precluded its use in whole meat food and has reduced its market value. (Naveena and Mendiratta, 2001). Spent layer meat poses serious problems with regard to both processing and utilization (Singh *et al.*, 2000). The direct use of meat from spent layers causes problem because the collagen content increase with age (Wu *et al.*, 1996). Spent layer has been used in canned product such as soup, sauces, stews and gravies or as stewing hens (Voller *et al.*, 1996). Ajuyah *et al.*, (1992) found spent layers to be high in n-3 fatty acids and suggested that they will be used in the development of health oriented further processed poultry product.

MATERIALS AND METHODS

The experiment was carried out at poultry unit of Teaching and Research farm, Ladoké Akintola University of Technology Ogbomoso Oyo State, Nigeria. Fifteen spent layers (Arco Black) were obtained from a commercial farm in Ogbomoso, the birds were of 20 months old fed on regular layer feed and of average weight of 1.2 kg. The birds were divided into 5 treatments of 3 replicate. Papain was extracted from unripe pawpaw fruit with little or no cost of obtaining the papain.

Processing procedure

The birds were processed manually and slaughter by severing the jugular vein and carotid artery at the ventral base of the head and allowed to bleed for about 2 minutes before they are scalded. They were scalded at a temperature of 80°C for about 30 seconds and defeathered by hand. The birds were eviscerated, washed, dressed and cut into primal cuts.

The breast and thigh meat were however used for further physio-chemical and sensory analysis, then the muscle were sliced in to fillets of about 1cm thickness and short deep cut of about 2cm length was made equally on each side of the muscle fillets to improve the penetration of the enzymes. The meats were then soaked in papain of different concentration of 0.25%, 0.50%, 0.75% and 0.10% and control as 0% for 30 minutes. After 30 minutes the meat were removed from the enzyme solution all at the same time and further analysis was carried out on the meat.

Cooking Loss

Samples of the meat were weighed and cooked at 80°C in water bath for 20 minutes and the difference in weight before and after cooking was calculated. The cooking loss was calculated based on this formula:

$$\text{Cooking loss (\%)} = \frac{\text{Pre - cook meat weight} - \text{post cook meat weight}}{\text{Pre - cook weight}} \times 100\%$$

Drip Loss

Unknown weight of meat was weighed and refrigerated for 24 hours. The meat was weighed again and recorded.

$$\text{Drip loss (\%)} = \frac{\text{Pre - chilling meat weight} - \text{post chilling meat weight}}{\text{Pre - chilling weight}} \times 100\%$$

Chilling Loss

The soaked meat was cut and frozen for a period of 24 hours, the weight before and after freezing was observed and recorded.

Thermal Loss

A soaked meat of 6cm in length was cut for each treatment and replicates and was cooked in water bath at 80°C for 20 minutes. The change in length before and after cooking was observed and recorded.

pH

The pH values are determined by the use of a digital pH meter, an approximately 10 g of minced meat was homogenized with 40ml of distill water using a tissue homogenizer.

Chemical properties

The meat was subjected to proximate analysis to test for crude protein, crude fiber, ether extract and ash. Chemical properties were determined according to the Association of Official Analytical Chemists (AOAC) method (2000).

Organoleptic properties

This was conducted using a 10 semi-trained panelist according to the procedures of AMSA (1995). Samples from each treatment were wrapped in polythene nylon which could not be destroyed by cooking process and were tagged for easy identification. The samples were cooked in a water bath with no spices added to the meat for 20 minutes at 80°C and was served to 10 semi-trained panel drawn from students and staff both in the Department of Agricultural Economics and Department of Animal Nutrition And Biotechnology, Ladoké Akintola University Of Technology, Ogbomoso, to evaluate the samples for colour, juiciness, tenderness, odour and general acceptability. The assessment was based on a 9 point hedonic scale. The score was arranged in a descending order, the maximum was 9 and the minimum was 1.

Statistical analysis

Data obtained are subjected to analysis of variance (ANOVA) using SPSS (2000) computer package.

RESULTS

The result of the physico-chemical properties of spent layers meat tenderized with papain was revealed in Table 1. From the table, the result shows that pH increases at T₃ (6.47) and later decreases at T₄ (6.07) and T₅ (5.83). Thermal loss, cooking loss, drip loss, and chilling loss were significantly (P < 0.05) affected by papain. The value obtained for ph shows that T₃ (6.47) was significantly higher than others, while the value obtained for thermal loss shows that T₁ (36.11) was significantly (P<0.05) higher than T₂ T₃ T₄ T₅. The value obtained for drip loss shows that T₅ (17.22) was significantly (P<0.05) higher than others, for cooking loss the value shows that T₄ (66.85) was significantly (P<0.05) higher than others while the value obtained for chilling loss shows that T₃ (12.16) and T₄ (12.54) were higher and the least was T₁ (7.64).

The crude protein ranges from 23.30 to 28.90 where T₁ has the highest value and T₅ has the lowest value for crude protein. The value obtained for ether extract shows that T₁ (12.00) has the highest value and T₃ and T₄ has the lowest value. The value obtained for ash content ranges from 2.07 to 1.77 for which T₅ (2.07) was rated highest and T₃ (1.77) was rated lowest, the significant differences were observed between T₁ (2.01), T₂ (1.89) and T₄ (1.86).

Table 1. Physico-chemical properties of spent layers meat tenderized with varying levels of papain.

Parameters (%)	T ₁ (0.00 %)	T ₂ (0.25 %)	T ₃ (0.50 %)	T ₄ (0.75 %)	T ₅ (1.00%)	SEM
Ph	6.27 ^a	6.27 ^b	6.47 ^a	6.07 ^c	5.83 ^d	0.03
Thermal loss	36.11 ^a	26.67 ^b	21.11 ^c	25.00 ^{bc}	30.00 ^b	0.98
Cooking loss	25.39 ^d	58.89 ^b	52.56 ^c	66.85 ^a	65.55 ^a	2.93
Drip loss	7.67 ^c	9.42 ^c	13.47 ^b	10.59 ^c	17.22 ^a	0.61
Chilling loss	7.64 ^b	8.37 ^b	12.16 ^a	12.54 ^a	9.06 ^b	0.44
Crude protein	28.90	28.14	26.50	24.76	23.30	
Ether extract	12.00	11.00	10.00	10.00	11.00	
Ash	2.10	1.89	1.77	1.86	2.07	

^{abcd} Means on the same rows with different superscript are significantly different (P<0.05)

Result on the organoleptic properties of spent layers meat tenderized with varying levels of papain.

The result of the organoleptic properties of spent layers meat tenderized with papain was presented in Table 2. The results shows that the flavor was not significantly (P<0.05) affected. However, colour, juiciness, ease of fragmentation, apparent adhesion, residual after chewing and acceptability were significantly (P<0.05) affected. The value obtained for colour shows that T₄ (9.40) and T₅ (8.50) were significantly (P<0.05) higher than others. The values obtain for juiciness shows that T₄ (5.80) has the highest value while T₂ (4.60) has the lowest value and little significant differences between T₅, T₃ and T₁.

For Ease of fragmentation, the value obtained shows that T₂, T₃, T₄ and T₅ were significantly (P<0.05) higher than T₁. The value obtained for apparent adhesion shows that T₂, T₃, T₄ and T₅ were significantly (P<0.05) higher than T₁ which is the control. The value obtained for residual after chewing shows that T₄ and T₅ were significantly (P<0.05) higher than others while values obtained for the overall acceptability ranges from 4.00 to 6.40 and T₁ (6.40) was the highest and T₅ was the lowest.

Table 2: Organoleptic properties of spent layers meat tenderized with varying levels of papain.

Parameter	T ₁ (0.00%)	T ₂ (0.25%)	T ₃ (0.50%)	T ₄ (0.75%)	T ₅ (1.00%)	SEM
Colour	5.80 ^b	6.00 ^b	5.60 ^b	7.40 ^a	8.20 ^a	0.25
Flavour	5.80	5.40	5.00	4.40	4.20	0.25
Juiciness	5.20 ^{ab}	4.60 ^b	5.60 ^{ab}	7.20 ^a	6.60 ^{ab}	0.33
Ease of fragmentation	5.40 ^b	6.80 ^a	7.20 ^a	7.40 ^a	7.20 ^a	0.22
Apparent adhesion	4.40 ^b	6.20 ^a	6.20 ^a	7.00 ^a	6.80 ^a	0.27
Residual after chewing	4.00 ^b	5.60 ^{ab}	5.80 ^{ab}	6.80 ^a	7.00 ^a	0.32
Acceptability	6.40 ^a	5.40 ^{ab}	4.40 ^{ab}	4.80 ^{ab}	4.00 ^b	0.33

^{ab} Means on the same rows with different superscript are significantly different (P<0.05)

DISCUSSION

The addition of proteolytic enzyme papain will cause softening of muscle tissue resulting in increased tenderness and significantly water content of the meat treated with papain (Sinku *et al.*, 2003). This also account for the higher value obtained in the cooking loss and the thermal loss for the treated samples with papain compared to the control, the cooking and thermal loss increases as the inclusion levels increases, as papain is highly aggressive, indiscriminate enzymes causing significant degradation in both myofibrillar and collagen proteins, yielding protein fragment of several sizes thus increasing meat tenderness (Swatland, 1984). The value for drip loss and chilling loss showed that there is an increase in their value as the inclusion levels increases and this implies that the ability of the meat to bind water will increase due to the tenderization effect of papain which results in meat tenderness as muscle fibers are filled with intracellular sarcoplasm, which is a liquid made up of approximately 80% of water as

well as proteins, lipids, carbohydrate and inorganic constituents (Chan, 2011). The pH rated shows that T₅ (5.83) was more acidic compare to others, this was attributed to its inclusion rate that was higher and the pH near 5.7 was desirable for maintaining quality of poultry breast meat (Khan and Natamura 1970).

The crude protein content of T₁, T₂, and T₃ were higher than that of T₅. The difference in crude protein could possibly be due to the variation in the inclusion level of papain used, as myofibrillar proteins such as contractile proteins, regulatory proteins and cytoskeletal proteins (Aberler *et al.*, 2001) are faster hydrolyzed by papain when they are in denatured state (Rattrie and Regenestein, 2000). The ether extract and ash content of T₁ and T₅ were higher than others and this shows that they have a high fat and mineral content than others.

Most enzymes used in tenderizing tough meat often degrade the texture of the meat, due to the broad substrate specificity and develop unfavorable taste due to over tenderization. (Cronlund and Woychikk, 1987). This is attributed to increase in colour, flavor, juiciness, ease of fragmentation, apparent adhesion and meat tenderness of meat tenderized with papain.

CONCLUSION

Based on the report of findings of this study, it was concluded that the tenderization of spent layers with papain showed good potential for the utilization of tough meat. The product obtained, despite the undesirable colour, the meat has a good nutritional value and better texture. Findings in the present experiment in physico-chemical and organoleptic properties has significant increase in cooking loss, drip loss, chilling loss, color, flavor, residue after chewing and acceptability showed the effective utilization of papain for tenderizing tough meat. Furthermore, the acceptability of colour can be enhanced by adding natural pigment.

RECOMMENDATION

It is recommended that papain is a good meat tenderizer which can be used in tenderizing tough meat and using the proteolytic enzymes at 0.25% do not have adverse effect on the physical, chemical and the organoleptic properties of the spent layer meat.

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Application of the Snowball Sample in the diagnostic based on factors that affect the productivity of Cherimoya production in MSEs: A case of study of Callahuanca and San Mateo de Otao, Peru

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ABSTRACT

It is evident that economic poverty is one of the problems presented by underdeveloped countries, and that their reduction is related to the increase in productivity in MSEs, given the high impact they have represented over time. Many entities have identified the importance of agriculture in the economic sector of the country. Therefore, a diagnosis is necessary in the area. The purpose of this diagnosis is to have a reference of the environment from the general point of view, in which all the interactions, descriptions, particularities and existing processes can be observed. In this first stage of the diagnosis, it is carried out using a non-probabilistic sampling, which is a common method in the investigation. One of the many methods used for identifying diagnosis is the snowball sampling that allows finding the diagnosis of hidden populations where there is no way to know all the characteristics of a population. The benefit of using this type of sampling is that a single initial informant can put the researcher in contact with other sources. Further, based on the results obtained, it was identified that the causes of the problem of the Cherimoya sector were associated to 3 critical processes that reflected the non-productivity of this sector: process of planning management and production control, process of logistic management and process of quality management.

INTRODUCTION

According to the data collected from INEI (2017), during 2017 the annual GDP registered a percentage change of only 2.5% compared to 4% of the past year, which is explained by the decrease of extraction activities (9.1% to 3%). In this decrease, the agricultural sector varied by -4% during the first quarter of 2017 compared to the last quarter of 2016. Diario Gestión (2017) justifies that this low growth was due to the effects of the “Niño Costero”: the destruction of 2,629 km. of roads, the loss of 198,000 homes and the difficulties they had in the logistics and communications of extractive activities.

The percentage variation of the last years of the agricultural sector that contributes to GDP has been 0.2%, 1.3%, 2.2% and 2.6%, 2.2% in 2014, 2015, 2016 and 2017 respectively. MSEs of the sector of Agriculture, hunting and forestry are made up of a total of 24,525 companies, of which 90.3% are microenterprises, while 7.8% are small companies. That means that in

this agricultural sector MSEs manage to reach an approximate participation of 98%. One of the products of this agricultural sector is the cherimoya, which has a stable production over the years.

LITERATURE REVIEW

Samuel Morley (2017) affirms, economic poverty is one of the problems that occurs mainly in underdeveloped countries. Within these countries is Peru, which is one of the Latin American countries that has presented major economic problems for decades. However, during 2004 and 2012, Peru found itself in a period where its economy improved, which was associated with the reduction of poverty in the country. This was due to the fact that the per capita income had an increase of more than 5.5% per year, and this scenario brought about that the total poverty is reduced. This idea justifies what Vladislav Maksimov (2017) indicates, who comments that, among the main solutions to reduce poverty in underdeveloped countries, it is necessary to increase the level of income of workers.

Additionally, Gazi Salah and others (2017) affirm that there is a relationship between financial development, economic growth and the reduction of poverty in a country. This was observed in the study carried out by these authors in Bangladesh, where the financial sector improved the financial intermediation process through the adoption of a series of legal, political and institutional restructurings. As a result, GDP grew at an average annual rate of 5.8% during 2000-2009 and reflected a decrease in poverty. This idea is reinforced by Goedele Van Den and Miet Maertens (2017) in an investigation carried out in Senegal River Delta - Africa, between 2006 and 2013, where it is shown that the average income of a house grew by 4.3% and that reflected a reduction in poverty of 29.5% and 4.2% in inequality.

On the other hand, a study conducted during the years 2002-2011 in Peru by Gustavo Canavire-Bacarreza and Marcos Robles (2017), reveals that the population remained 6 of the 10 years in poverty, while the probability of leaving it It is much lower. For this reason, the authors Magdalena Kopelko and Malcom Abbott (2017) affirm that there is a strong relationship between the economic growth of an underdeveloped country and the productivity of the companies that make it up, due to the great impact it can generate. In addition, they indicate that companies use many means to become productive as technological tools and better use of their resources.

This idea, too, is supported by Chad Syverson (2017), who points out that the main indicator of economic growth for a company and for a business sector is productivity. In that sense, its measurement is relevant to properly determine the improvement of productivity, and thus avoid an incorrect measurement of its growth. For this reason, Jurgen Antony and others (2017) say that countries with high levels of productivity and high technology should invest their resources to innovation, while countries with low levels of productivity should direct their resources to imitate and standardize the market in which they develop to achieve economic growth.

According to the authors Ludovica Savlovschi and Nicoleta Robu (2011), the vast majority of countries have more than 99% of their companies classified as MSEs, which have a great influence on the GDP of each country.

For Sonu Garg and Parul Agarwal (2017), the MSEs have a different meaning depending on the country, which is distinguished by the number of employees, capital investment, annual turnover and the amount of total assets in the company. For example, in their study they affirm that India has micro, small and medium enterprises that represent 37% of the GDP and 90% of

the total of companies in different economies. This means that they are part of an important segment that symbolizes the growth engine in the economy of this country.

In addition, according to Thi Hong Van Hoang and Others (2018), they indicate that the set of micro-enterprises that a country can have is a source of progress, since these as a whole boost the economy by consuming raw materials prepared as inputs for their products. , its demand power of intermediate goods is also recognized.

The contribution to GDP and the percentage represented by the MSEs is also replicated in a study conducted by Muhammad Mahboob Ali and others (2017) in Bangladesh, Thailand and the Philippines, which indicates that the MSEs represent 99% of the total of private companies, approximately, and its participation in the GDP varies between 28% and 30%. According to the Ministry of Production of Peru (2015), in the Industrial Statistical Yearbook - Mipyme and Internal Trade 2015, within the business sector, Peruvian micro-enterprises represent 95%, equivalent to 1,607,305 entities, while Small businesses represent only 4.3%. These figures show that the MSEs have a high percentage of participation in the entire economic sector of Peru.

Muhammad Mahboob Ali and others (2017) affirm that small and medium enterprises generate job opportunities, create wealth, promote modernization and contribute with technological changes.

However, they indicate that job creation and innovation are necessary for the development of the economy, as is the case in Asia, where MEPs represent 38% of GDP. Jaroslav Belás and others (2015), also, maintain that, for the countries of low development, the micro and small organizations are elements of economic stability that generate employment, and in that way they increase the income of the employees, improving their living conditions.

According to Eshetu and Ketema (2013) they indicate that micro and small companies are considered important vehicles to face the challenges of the problems faced by underdeveloped countries, such as: high unemployment rates, low economic growth and inequity in the country.

In Peru, according to the last report published by INEI (2017) on the employability rate in Peru, Peruvian MSEs employ 70.2% of the economically active population of Peru. Therefore, the development of full employment in the MSEs will directly impact the GDP. This is the case of the Government of the Federal Democratic Republic of Ethiopia, where Haftom Haile Abay and others (2014) carry out a study in which it is indicated that MSEs are an important force for generating employment and a more equitable distribution of income, for thus be able to stimulate the economic development of this country.

On the other hand, John W. Mellora and Sohail J. Malikb (2016) carry out a study that reveals that in low and middle-income countries, where the economic reality is based on whether there is a rapid growth of agricultural production and increase the income of small commercial farmers would represent a high impact on their economy, in such a way that it would be possible to reduce rural poverty.

This premise is also supported by Atya Nur Aisha and others (2016), who indicate that the development of the agricultural sector is a way to boost economic growth, due to the predominance of activities related to agriculture. Likewise, Marcos Ivanic and Will Martin

(2017), indicates that in poor countries the increase in agricultural productivity has a high impact on the reduction of poverty, and that it has been shown that poverty reduction impacts more in rural areas than in urban areas. This justifies the point made by Satis Devkota and Mukti Upadhyay (2013), who indicate that people who work in agriculture tend to have lower incomes, which is consistent with the fact that poverty is concentrated in rural areas.

From this statement, it is important to understand the participation of the agricultural sector within our country. Within the report "MSEs by business stratum" presented by SUNAT (2015), are the MSEs of the "Agriculture, hunting and forestry" sector, which are made up of a total of 24 525 companies, of which 90.3% are microenterprises, while 7.8% are small businesses. That is to say that, in this sector, the MSEs manage to reach an approximate participation of 98%.

Regarding the importance of peruvian MSEs in this sector, it is decided to make a diagnosis of the area. Yter Vallejos (2008), defines that the diagnosis is the first phase to identify the nature of a problematic situation. The purpose of the diagnosis is to have a reference of the environment from the point of view of the whole, in which you can observe all the relationships interactions, descriptions, peculiarities and existing processes.

According to Lisa given (2008), it indicates that, in this first stage of diagnosis, it is done using a non-probabilistic sampling, which is a common method in the investigation. Unlike probability sampling, where each participant has the same probability of being selected, participants selected using the non-probabilistic sampling technique are chosen because they meet the pre-established criteria.

Oisín Tansey (2007), indicates that the Convenience Sampling technique implies that the investigator selects the available interviewees, regardless of the characteristics, until the required sample size has been reached. As your title suggests, your main advantage lies in your convenience: There are no strict selection rules and the sample can be drawn in the easiest way for the investigator. However, its main disadvantage derives from the same feature: No selection rules, no way to know which broader population represents the sample group or how the sample may differ from other potential samples

On the other hand, it points out that another method is Quota Sampling, which tries to ensure that certain characteristics are present in the sample in proportion to its distribution in the general population. This method provides the investigator with more certainty regarding the composition of the sample and its relationship with the broader population of interest. However, as with most sampling methods, there are certain drawbacks in this selection method. First, the investigator must know the characteristics of the population in advance, which is not always possible. Second, although the sample is representative of the population on the characteristics of interest, there is no way for the investigator to be sure that it is also representative of other characteristics that may be important, for example, class and ethnicity.

In addition, the author mentions that Snowball sampling is one of the best-known forms of non-probabilistic sampling is the snowball sampling method, which is particularly suitable when the population of interest is not completely visible and when compiling a List of the population poses difficulties for the investigator. The snowball or chain reference sampling method implies identifying an initial set of relevant respondents and then asking to suggest other potential subjects that share similar characteristics or that have relevance in some way for the object of study. The investigator then interviews the second group of subjects and requests that they provide the names of other potential subjects of the interview. The process

continues until the investigator considers the sample to be large enough for the purposes of the study, or until respondents begin repeating names to the extent that new rounds of nominations are unlikely to throw new Meaningful information. As with random sampling, the Snowball method is not as uncontrolled as your name might suggest. The researcher is very involved in the development and management of the start and the progress of the sample and seeks to ensure that the chain of references remains within the limits that are relevant to the study always.

Success Cases

Steven W. Purcell and others (2016), conducted an investigation of sea cucumber fishermen. WhatS Authors, point out that the method of diagnosis, was through interviews based on questionnaires of fishermen who had recently harvested sea cucumbers. In each village, an average of five fishermen were found for interviews using the snowball technique and key informants, regardless of fishermen's age, fishing mode, frequency of fishing trips and catches, and in that way, the critical need to improve the income and well-being of fishermen could be identified.

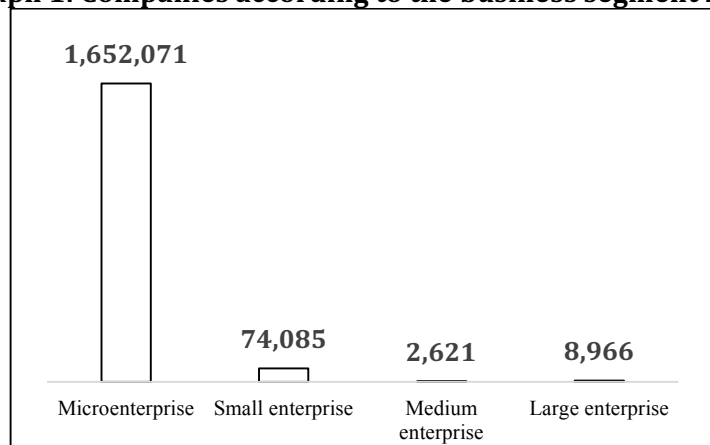
Another case study is the one presented by Shuh-Jen Sheu and Others (2008), who conducted research on Drug Administration in hospitals. The diagnostic method was through a snowball sampling to recruit participants. To this end, a semi-structured questionnaire was used to record types of error, hospital and nursing background, patient consequences, error discovery mechanisms and notification rates. As a result, information was collected from eighty-five nurses, reporting 328 errors in Drug Administration, which most errors occurred in surgical medical rooms, during daytime shifts, by nurses Who work less than two years

Study area

According to the Superintendencia Nacional de administración aduanera y tributaria (2017), they say that the mypes is showing high significant indexes for the Peruvian economy, due to its high participation in the percentage of the national production.

On the other hand, as indicated in the Industrial Statistical Yearbook, MMSEs and internal trade 2016, officialized by the Ministry of Production, Graph 1 shows that in the entire business sector, micro and small enterprises account for 95.1%, equivalent to 1,652,071EStas figures show the importance and high participation of MSEs in the country's economic sector.

Graph 1: Companies according to the business segment 2016



Source: SUNAT, 2016

The importance of agriculture and mypes in the country's economic sector has been identified by the figures indicated. It is therefore necessary to analyze the relationship between these two sectors and their economic representation at the national level.

Table 1 shows the results obtained by the Ministerio de Producción (2016), where MSEs in the "agriculture, hunting and forestry" sector are formed by a total of 23.908 companies, of which 90.1% are micro-enterprises, while 7% are small businesses. In other words, in this agricultural sector, Mypes achieves an approximate share of 98%. Therefore, it is important to carry out an investigation in this business stratum due to the high economic power who have

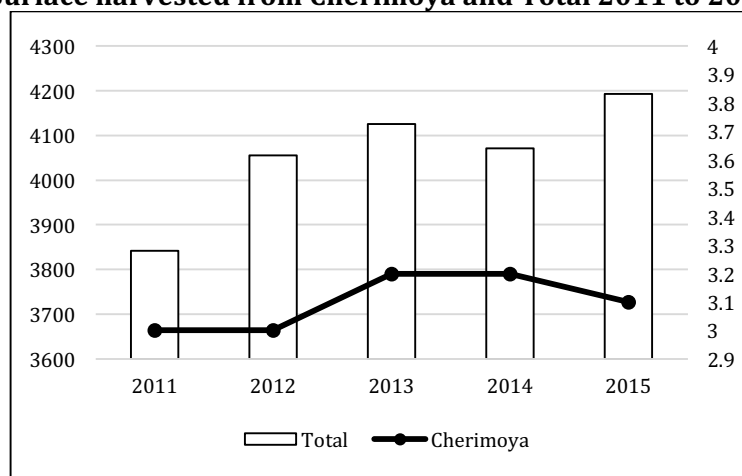
Table 1: MSEs per stratum 2015

<i>Type</i>	<i>Detail</i>	<i>Total MMSEs</i>
<i>G</i>	Wholesale and retail trade	762,127
<i>K</i>	Real estate, business and rental activities	228,626
<i>O</i>	Other community service activities	180,522
<i>D</i>	Manufacturing	151,584
<i>I</i>	Transport	137,186
<i>H</i>	Hotels and restaurants	126,113
<i>F</i>	Construction	58,093
<i>N</i>	Health services Activities	24,468
<i>A</i>	Agriculture, livestock hunting and forestry	23,908
<i>M</i>	Private education	15,953
<i>C</i>	Mining	11,562
<i>J</i>	Financial institutions	3,564
<i>B</i>	Fishing	3,495
<i>E</i>	Electricity, fishing and water	1,576
	TOTAL	1,728,777

Source: SUNAT, 2015.

Graphic 2, elaborated with the data presented by the Ministerio de Agricultura (2015), it is appreciated that, during the period from 2011 to 2015, the total harvested agricultural area has managed to grow by 9.15%, ie, has presented a positive trend of growth. However, it is remarkable the scenario presented by the Cherimoya sector, which shows great stability, which could reflect a problem in the production of this fruit.

Graph 2
Surface harvested from Cherimoya and Total 2011 to 2015



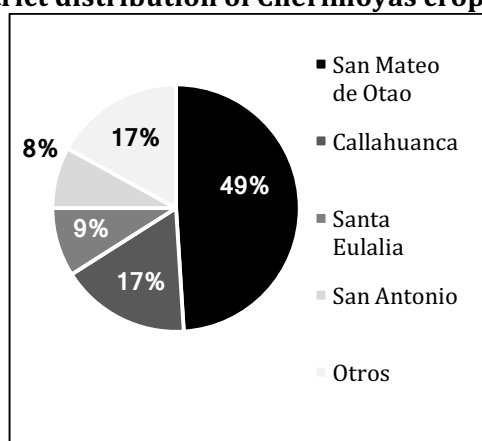
Elaborated by the author
Source: Ministry of Agriculture, 2015

With the graph presented, the production of Cherimoya has remained constant in recent years. In order to obtain a better analysis, the zone with the largest harvest distribution of Cherimoya was defined with the following considerations: Percentage of harvest at departmental level, percentage of harvest at provincial level and percentage of harvest at district level.

It is important to consider that there are 4 major producers of cherimoya in the world: Spain, Peru, Chile and New Zealand. Spain is considered the world's largest producer of this fruit with output ranging from 38000 to 50000 tons per year. The distribution of this production corresponds to 80% -90% to the national market, while 10% -20% is for export market. Which makes a notable difference for Peru as it produces between 20,000 and 25,000 tons and only exports between 1% and 2% of this production.

In view of what was raised and according to the data obtained by the Ministry of Agriculture (2015), it is observed in Graphic 2, 42.5% of the harvest of Cherimoya comes from the department of Lima. Thus, 62.5% of the harvest belongs to the province of Huarochiri. Finally, in this province it is obtained that 66% of the harvest, coming from the districts of San Mateo de Otao and Callahuanca. In order to have a greater representativeness of the sector, this research project will focus on the two last districts mentioned.

Graph 3: District distribution of Cherimoyas crops (2009-2015)



Source: Ministry of Agriculture, 2015.

METHODS

Instrument development and data collection

In order to define the research population, the number of farmers in the research area was determined. The number of farmers amounted to 1320 between the two districts, San Mateo de Otao and Callahuanca, according to the report delivered by the municipal secretariat of both districts.

The sample size was defined from the sample size formula for finite populations, as indicated by the author M.H. Badii and others (2008). For the present investigation, it was considered to take the following values to apply them to the formula:

- Population size (N) = 1320
- Sample error (d): 90%
- Proportion of success (p): 50%
- Failure rate (q): 50%
- Value for trust (Z): 1.28

Figure 1: Formula for sample size

$$n = \frac{Nz^2\sigma^2}{d^2(N-1) + z^2\sigma^2}$$

Source: Badii and Other (2008)

The result of the sample determined that the sampling technique chosen in 64 farmers should use to obtain results representative of the sector under study

Snowball Method

The snowball method was used as the non-probabilistic sampling technique through interviews with numerical questions, closed and open to growers of cherimoyas to perform an effective analysis of the sector.

The interviews lasted between 15 and 25 minutes and were carried out in the farmers' homes or in the places most frequented by the population of both districts: the square and markets.

Sample Characteristics

MSE Cherimoya Sector Profile

This sector does not have a clear definition of the processes. The MSEs dedicated to the cherimoya production are totally isolated and do not have formalized procedures that allow them to be executed. They are totally unpredictable and poorly controlled.

The production of Peruvian cherimoya has remained constant in recent years, however, Spain which is the world leader country in the production of this fruit produces 233% more tons per hectare compared to Peru. This is reflected in the low annual production of Peru, which represents 43% of Spanish production. For this reason, it is possible to affirm that there is a problem of low productivity in this sector.

Farmer profile

Farmers who belong to this sector do not have technical education. Many of them only have school education. They are people who depend totally on the income that the sale of this fruit can give them which are only in harvest months. Therefore, they are not willing to invest in improving their production and risk the little money they have.

RESULTS

Table 1 shows the details of the 30 results obtained from the interview made to the farmers and how these are linked to the inputs and outputs of the cherimoya sector environment.

It's possible to observe 13 results that affect the input of the sector's environment, such as production planning, production records, the purchases made and the techniques previously used to produce cherimoya.

On the other hand, there are 17 results associated with the output of the environment of the sector under study, which mainly impacts the quality of the product and the maintenance activities of the crop.

Further, based on the results obtained, it was identified that the causes of the problem of the cherimoya sector were associated to 3 critical processes that reflected the unproductiveness of this sector, which are the following:

- Process of planning management and production control.
- Process of logistics management.
- Process of quality management.

Table 1: Results of the interviews with the cherimoya farmers of San Mateo de Otao and Callahuanca

No	Result of the interview	Type	Non-productivity	Process
1	None produces more than 10 tons of production per year, with an average indicator of 6-8 tons / hectare	Output	-Low production, less amount of cherimoyas to sell	Planning, Control and execution of production
2	40% of farmers say they do not control their processes. The other 60% say control by knowing about them.	Input	-Inefficiency in the use of the land -Loss of production due to lack of control.	Planning, Control and execution of production
3	40% buy what the supplier has, another 40% buy 1 time, and the rest buy more than once a year.	Input	-high percentage of low quality products or depletion	Planning, Control and execution of production
4	45% do know what they need per tree for talks, 40% for experience and 15% only use the inputs they have.	Input	Don't just buy what you need, increase your costs	Planning, Control and execution of production
5	72% of farmers do not register their processes (inputs, dates, quantities used)	Input	They don't take the maximum performance that a tree can have.	Planning Control and execution of production
6	90% do not record how much it has produced per category.	Output	Inefficiency in the use of resources (MP, inputs, Etc)	Planning, Control and execution of production
7	48% do not have production records from previous years.	Input	-Does not know which category is more profitable to the farmer.	Planning, Control and execution of production
8	More than 80% of farmers do not plan their production	Input	-Loss of earnings by sweeping sales, not knowing the quantities by category	Planning, Control and execution of production
9	No farmer planned how much this year will produce	Input	-Cannot know how much it can produce, so it's impossible plan the need for resources.	Planning, Control and execution of production
10	80% defines the number of people to work according to the size of their land, the remainder outsourcing the work by activities.	Input	-Loss of production due to inefficient planning -Inefficiency in production times	Planning, Control and execution of production
11	60% do maintenance of their crops only once a year, 30% do 2 times more.	Output	-low production due to lack of inputs. -Increased costs by not knowing how much it requires.	Planning, Control and execution of production

12	More than 80% of growers have wholesalers as the main customers of their fresh harvest.	Output	Lose opportunity to buy a new way of selling	Logistics Management
13	90% of growers do not know the value of Cherimoya in the final market	Output	-Growers do not know the negotiating power they have with their production. -There is no sale price established by the growers, nor a minimum to offer to the buyers.	Logistics Management
14	100% of growers sell independently, there is no cooperative or collection center at the district level.	Output	-Wholesalers are the ones who decide the final price.	Logistics Management
15	100% of the growers who have as main clients the wholesalers stated that these are the ones that put the final price per kilo of Cherimoya.	Output	Growers do not receive an adequate profit that allows them to invest and increase their productivity	Logistics Management
16	100% of farmers do their purchases in an individual way.	Input	-The price that farmers pay for their inputs or services is only that requested by their suppliers, without negotiation or discounts for purchases in quantity and/or jointly between several buyers.	Logistics Management
17	No farmer has close relationships with suppliers.	Input	-Hinders negotiation and pricing.	Logistics Management
18	No farmer has close relations with wholesalers.	Output	-Hinders negotiation and pricing. -Generates loss of opportunity with respect to selling prices.	Logistics Management
19	There is No knowledge of other providers outside the area.	Input	-Loss of opportunity to get a better price at the time of making purchases. -it does not allow the development of other farmers.	Logistics Management
20	5% of farmers are both wholesalers, who buy the Chirimoyas from their colleagues.	Output	-They take away the opportunity to grow together, and they do it individually.	Logistics Management
21	The 90% of farmers collect the fruit of the tree without the beginning of the ripening process (green color to Pale green).	Output	Immature Cherimoya generates loss of income	Quality Management
22	90% of farmers do not prune the trees of Cherimoya, which generates that the tree does not withstand the weight of the harvest and the Chirimoyas fall from the tree.	Input	Chirimoyas not suitable for sale or consumption	Quality Management
23	80% of farmers do not classify their crops by degree of maturity, instead, it allows the wholesaler to do so and place the price by category.	Output	Loss of income due to the quality of the fruit	Quality Management
24	Only 40% has good quality grafting patterns that will allow them to homogenize their production.	Input	Low quality Chirimoyas	Quality Management

25	100% of farmers do not verify that cherimoyas with wounds have healed before they are offered to their purchaser.	Output	Chirimoyas with wounds without scarring	Quality Management
26	The 95% does not carry a control (booklet) of the exact date of harvest, which does not allow to control the days of maturity that has the cherimoya so that they can sell them faster.	Output	Cherimoya lifespan	Quality Management
27	75% does not check that 100% of its harvest is clean after washing.	Output	Chirimoyas with materials on its surface	Quality Management
28	90% is not free from the pest attacks of the fruit fly, which affects the final product.	Output	Attack of pests in the fruit	Quality Management
29	60% of farmers do not invest in treatments to improve the epidermis problems that affect their harvest.	Output	Chirimoyas with alterations in the epidermis	Quality Management
30	100% consider that the weight of the Cherimoya is more important than the form of this at the time of selling their production	Output	Loss of income	Quality Management

Source: Elaborated by the author

DISCUSSION OF RESULTS

To be able to discuss the results, Table 3, indicate the data of the country with the highest productivity of custard apple, Spain. This information is necessary to determine the difference between both countries and to evaluate the productivity of the cherimoya sector in Peru.

Table 3: Productivity comparison between the Spain and Peru

Country	Surface (ha)	Production (tn)	Productivity (tn/ha)
Spain	3.1	44.1	14.3
Peru	3.7	24.8	6.7

Elaborated by the author

Source: Ministry of Agriculture of Peru, 2016.

Source: Statistical Yearbook forward Spain, 2016.

Table 1 shows that, although both countries have a similar number of hectares, Spain has a yield of 233% more tons per hectare compared to Peru. This is reflected in the low annual production of Peru, which represents 43% of Spanish production. For this reason, it is possible to affirm that there is a problem of low productivity in this sector and it will be complemented with the analysis of the results of the interviews.

- (1) The first result obtained was on the average yield of farmer's crops in San Mateo de Otao And Callahuanca, the producers indicated that they produced about 6 to 8 tons of cherimoya per hectare, which when comparing with the productivity of the crops of the largest producer of this fruit, Spain, evidences the little use of the Cherimoya tree, which can be by factors such as inefficient cultivation techniques, poor maintenance of the crop, poor fertilization of the tree, among others. By having low yield in the crops, the level of production is not enough to be able to satisfy the internal and external demand, which are costs of sale opportunity.

- (2) The interviews carried out gave as one of the results that 40% of the farmers interviewed do not control in any way their productive processes, either direct processes to the field, direct to their purchases or sales. This generates losses in production due to products that are depleted by quality factors and cannot be given in a good way to the consumption of visitors, as well as the sale of wholesalers.
- (3) It is evident that farmers did not control the purchases of their inputs in General, 40% buys the amounts that the supplier establishes as a sales lot, which makes the farmer dependent and has no control over his purchasing management, this style of purchase can generate on cost for purchases not required, as well purchases by necessity, in both scenarios, monetary losses fall. Another 40% of the farmers purchase annually, depending on their quantities required in previous crops, which makes their purchase costs less, since they buy at scale and the sale price for higher amounts reduces, being beneficial for the Farmers. The rest of the producers, buy when they require the inputs, can buy more than once a year. Undoubtedly, the purchase management of farmers in general, is not done correctly, which affects the planning of purchases and the cost of inputs, which generates money losses and making the economic results unproductive.
- (4) Within the control of the crops is the correct use of inputs towards crops, in the interviews conducted, 45% of the producers say they learned the requirements of fertilizers, fertilizers, water, among other inputs for the talks In the districts, where they taught to give a good treatment to the Crops to get better production results. However, 40% of respondents mentioned that with respect to the use of inputs for each tree were amounts they had learned with experience over the years on Cherimoya crops, which makes them empirical producers and not They can maximize the yield of their crops, which leads to a low productivity production.
- (5) Recording processes, makes it easy to control executions of activities, costs, production and marketing; Which in turn makes it easier to make a planning plan, to recognize the flow of processes, among others. However, 72% of the farmers do not register their processes, in which it would help them to know the quantities of resources used, the Times by activity, the productions obtained, the losses generated. Producers failing to register fall into resource use and consumption inefficiencies, which leads to increased production costs.
- (6) An important factor for the marketing of Chirimoyas is based on the registration by category of the produced fruit, which depend on the size and shape. The Wholesalers have established purchase prices by category, as it is thus their way of buying, but also, they have the mode of purchase when sweeping, which makes reference, when buying the total production of a farmer no matter the category that At a fixed price, this modality is generally given when the farmer does not have a record of his production per category and 90% of the farmers interviewed do not register that way, which causes them to sell when sweeping and not be able to have a profitability Correct for its production.
- (7) An important and basic point to register on the part of farmers is the production of previous years; In spite of this, 48% of the producers have no record of the productions of previous years. By not having to register their productions, they cannot get to know their production capacity, nor plan the resource requirements to be used; Therefore, it cannot identify the way in which production costs can be reduced, let alone create commercial relations with wholesalers or transformers of the fruit, since it does not have a solid knowledge of its previous productions and cannot Offer quantities to offer.
- (8) Then to make themselves known that the behavior of the farmers of San Mateo of Otao And Callahuanca is not to register or control their processes, another point to consider is that 80% of respondents do not make a production planning to obtain annually or by harvest, is thus What They lose production level by not planning the time of the

productive processes and the resources to be used. While it is true that there are 20% of the producers that if they plan, their way of planning is inefficient and that is reflected in the yields of their crops. The problem of low productivity in the cherimoyas producing sector of these districts is based on its little or almost zero planning of its production.

- (9) Within the non-planning of the farmers, one point to consider that in the totality of the interviewees did not plan the production to have at the end of each harvest or yearly, which represents a lack of knowledge in the requirements of resources to Use in their crops can cause a shortage or oversupply of resources over the period of cultivation, both scenarios fall in the rise of production costs, so it is affected the final productivity in the Farmers either by factors of production or profitability.
- (10) Labor to require in the process of Production Whether in the activities As a harvest, pruning, maintaining, among others, influences the amount of personnel to use and the quality of labor. The interviews resulted in 80% of selected farmers defining the number of staff to use for production activities; While the rest outsourced the activities to be done. Producers who define the amount of hand Work They do so empirically with quantities already used in previous years and are based on the extension of the crops to work, this type of resource designation is inaccurate and inefficient that Leads to over costing problems due to excessive labor and high times of
- (11) The 60% only performs an annual maintenance of the crops, which is a bad practice, because it does not give the necessary care to the trees of Cherimoya. The low performance obtained by this bad practice is due to the loss of production opportunity and the Losses generated either by the fall of the fruit in an early time to harvest or by excessive harvest time. However, there are 30% of the producers interviewed who do 2 to more times a maintenance to farmland, who have better results compared to those who only perform an annual maintenance. Finally, 10% of farmers do not maintain their crops, they are those whose yields are very low, about 3 to 4 tons of cherimoyas per hectare.
- (12) Farmers sell their products in different ways (ice cream, pisco, etc.). The main form of presentation is the fresh Cherimoya, which is sold directly to wholesalers. More than 80% of the growers sell exclusively to these their fresh harvest, the remainder transforms the fruit into a finished product for the final customer bandage (ice cream, drinks, jam, yogurt, etc.). Farmers have the possibility to innovate and sell their products in different ways to generate greater profits. However, being a large percentage that sells its harvest only to wholesalers, there is a great dependence on these and you miss the opportunity to get a new way of selling.
- (13) Most growers do not know the price of Cherimoya in the final market; That is, they are not informed about the profit that intermediaries obtain along the chain or the final sellers. This harms them in the sense that they do not know the true negotiating power they could have with wholesalers by selling their Product. In addition, it favors the wholesalers to ask for the price they want, taking advantage of the ignorance of the farmers.
- (14) All the farmers interviewed sell their production independently to each wholesaler. This favors the wholesalers to take advantage of these buying the Cherimoya at different prices, generating a loss for the farmer. Farmers in this case have no negotiating power because they sell separately and many are unaware of the price of Cherimoya in the final market. If a cooperative were formed, it would be the growers who could put the selling price or a base price to negotiate, increasing the amount sold and their earnings at the same time.

- (15) All farmers who sell their crops directly to wholesalers claim that these are the ones that put the final price per kilo of Cherimoya. Because farmers only want to sell all their production, they have no choice but to accept the price offered by the wholesaler, thus generating uncontrolled losses or false profits. In some cases, they think they are winning when they are actually losing. This generates that acquire only enough to survive, without being able to invest in its production, innovate and increase its productivity.
- (16) Wholesalers only see farmers as people from whom they get a product to be able to sell later, farmers see it the same way. There is No close relationship or any attempt at negotiation or agreement to obtain mutual benefits. This is detrimental to the negotiations of the moment and subsequent fixation of a selling price that may benefit both parties. Then it generates a loss of opportunity to improve the sale price of the Cherimoya and increase the profit of the farmers, as well as to improve the level of service that is given to the customers by the Cherimoya sector in the districts.
- (17) All the farmers do their purchases individually, there is no agreement between them or any board in which they agree to buy together the inputs. This prevents favorable conditions so that they can negotiate with their suppliers the possibility of making purchases in large quantities and generate a greater margin of profit. In addition, these conditions would also allow farmers to buy their inputs at a better price and have a cost savings of inputs.
- (18) Farmers do not know their suppliers, they simply have a seller-buyer relationship. This makes it difficult to negotiate and, in turn, the pricing that results in the increase in costs within the chain. Not being able to have an agreement with the supplier and engaging in a favorable negotiation for both parties prevents the overall costs of the sector's supply chain from being reduced.
- (19) Farmers only know their primary provider; That is to say, those who go to the same districts or the few who know in Chosica, where some growers travel on weekends to do their shopping. They have No knowledge of others who may sell inputs or materials to a better Price or better quality. So there is a loss of opportunity to lower your costs and get a better price.
- (20) This minority of farmers, who are also wholesalers, know the reality of the crops and take away the opportunity for smaller farmers or with less productivity to be able to progress or learn new ways of managing their business. They buy their production at a reduced price to generate a greater profit for themselves by taking advantage of the ignorance of others.
- (21) There is a productivity problem, because the harvested Cherimoya does not have the minimum quality characteristics for sale to the public. This is explained because 90% of farmers do not perform the necessary pruning technique during the first years of the Cherimoya tree. As a result, the Chirimoyas fall from the trees and generate a loss of production and that these are not suitable for sale and, therefore, for consumption. This result is related to the sub-process of preventive maintenance of the crop, since pruning is part of the maintenance of this fruit.
- (22) 40% do not have adequate patterns that allow them to produce chirimoyas of good quality, which is a wasted that generates unproductivity by not performing the grafts that produce a better crop that is reflected through a higher yield of the tree and High quality fruits. As a result, the production of chirimoyas of these farmers is of low quality, which impacts on the sale price demanded by the wholesaler. This result is linked to the sub process of agricultural techniques, therefore, the graft is a technique to improve the quality of the crops
- (23) Within the outputs of the quality management process, indicates that 90% of farmers collect the fruit without it has a pale green hue. This generates unproductivity,

because the extracted chirimoyas are immature or blackened, which results in a loss of product. The thread related to this result is that of agricultural techniques, since it requires an improvement in the technique to be used during the harvesting.

- (24) 80% of the farmers do not classify their production by degree of maturity, instead, it allows their buyer to make this classification. Therefore, the price per category is defined by the wholesaler generating loss of income due to the inadequate price variation in terms of the quality of the product. This result is associated with the agricultural technical sub-process because the farmer needs to know the correct classification of Chirimoyas by size according to the national standard and the price to be demanded for each rank.
- (25) None of the farmers check that the wounds of the Chirimoyas have healed before offering them to their buyer. As a result, the Chirimoyas lose their quality and the buyer has the benefit of paying a lower price for them. This result is linked to the quality control thread, as the farmer does not check that the product complies with the minimum quality requirements according to the Peruvian standard.
- (26) 95% of farmers do not control the exact date of harvest, which prevents them from taking control of the days of maturity and can be sold at the right time, which generates unproductivity of this process. This result is connected to the production log thread, as it is necessary to keep a manual record on harvest dates to avoid losing sales due to product quality.
- (27) 75% of the farmers interviewed does not ensure that all their crops are clean and consequently suitable for the sale and consumption of the public, generating unproductivity in the quality process. In turn, this result is directly associated with the quality control thread, which will help the fruit meet the minimum quality standards.
- (28) 90% of farmers interviewed do not have their crops free from the attacks of the fruit fly plague, which leads to infect the fruits with this plague. Therefore, this result is linked to the sub-process of agricultural techniques, which will allow the farmer to apply the appropriate techniques to combat this type of pests and so the quality of the Cherimoya is not affected.
- (29) 60% of the farmers interviewed are not willing to invest in treatments for epidermis problems that suffer their crops. This means that the fruit suffers alterations in their skin and that the buyer demands a less sale price for these chirimoyas. Therefore, this result is linked to the subprocess of preventive maintenance of the crop, which will focus on the procedures prior to follow to avoid malformations in cherimoya crops.
- (30) 100% of farmers interviewed considers that the weight of the Cherimoya is more important than the form it may have, because they assume that the larger they can ask for a higher price for their products. However, it has not been considered that within what is required by the Peruvian standard of quality of Cherimoya requests to meet the requirements of form and texture of this fruit in order to be sold. For this reason, this result is associated with the quality Control thread, as it will allow the farmer to consider the minimum quality requirements of the Cherimoya before he can offer it to his final purchasers.

According to the presented diagnosis, it is sustained that the cherimoya sector presents a productivity problem. These non-productivities are related to three critical processes: Management of Planning and Production Control, Logistics Management and Quality Management

CONCLUSIONS AND FUTURE RESEARCH

This research suggests two main findings. First, the application of the snowball method was key to discover the opportunities of the cherimoya sector. Second, the definition of three critical processes that would allow improving the productivity of the sector.

Snowball Method

The sector study required depth analysis to understand why productivity was low compared to Spain. For this, it was necessary to understand which sampling method was the appropriate one to carry out the diagnosis in the cherimoya sector. To this end, I had to research the type of profile MSEs and local farmer. This indicated that they were undeveloped mypes and that a large part of them worked independently. In addition, farmers had only primary education, so many of them had no idea how to improve their production.

Based on this information, it was determined that the diagnosis would be made by snowball sampling because it allowed in-depth interviews with numerical questions, closed and open to producers of custard apples to perform an effective analysis of the sector. This allowed us to conclude with 30 results that pointed to the non-productivity of the sector.

Critical process

The responses from the snowball sampling covered several factors that affected productivity: cultivation methodology, planning, care of the fruit, suppliers. From the results, 3 critical processes were found that were required to improve the productivity of the sector: process of planning management and production control, process of logistics management and process of quality management.

Process of planning management:

It was identified as a critical process, which is in the results, show a low production. This premise is related to the lack of controls. In addition, there is an inefficiency in the use of land, so you cannot know how much it can produce, so it is impossible to plan the need for resources.

Process of logistic management:

In showing of the results of the interviews, this process was identified as critical, as the producers do not know the negotiating power they have with their production, therefore it is difficult for them establish the prices to its fruit. By the way, they loss of opportunities with respect to selling prices. In addition, there is an opportunity to get a better price at the time of making purchases.

Process of quality management:

It is considered a critical process because farmers did not control the quality of the fruit throughout the production cycle, even when it was going to be sold. When consulting with the various farmers, it was evident that each one had different agricultural techniques which reflected the varied quality of cherimoya among all the interviewees. In addition, they considered that the cherimoya of better quality was the largest, when it is the opposite because the current demand requires smaller sizes. This process needs to cover the entire productive cycle from the preparation of the land to the pre-sale of the fruit in a way that ensures the quality standards demanded by consumers.

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A Review on Contextualizing Health Care for Adolescents living with HIV

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ABSTRACT

Adolescents Living with HIV (ALHIV) grow up in circumstances quite different from those of their other no-infected counterparts with both psychological, economic, social and sexuality challenges and vulnerabilities. They have an urgent need for improved approaches to address their specific health care needs. Improving outcomes for adolescents and reaching global targets for an AIDS FREE generation by 2030 will require evidence-based interventions and policies. However, there is a growing area of research in HIV where a considerable amount of efforts is still needed to inform the understanding of what works for this population. Evidence indicates higher rates of loss to follow up, and poor adherence, as well as increased needs for psychosocial support among ALHIV. This population group continues to be underserved by current HIV services and have significantly worse access to and coverage of ART. A number of care models have been designed over the years to improve health outcomes among this group of population. Effective establishment of HIV treatment demands that HIV diagnosis is followed by timely linkage to outpatient care, prompt initiation of anti-retroviral therapy and prophylactic medications when indicated, and subsequent adherence to prescribed medications as revealed in individual studies. Certainty of uptake and successful outcomes demands that, patients must progress through a sequence of steps taking into account environmental, patients predisposition, perceived and enabling factors as well as health behaviour models

Keyword: Adolescents, models, context, poor adherence, HIV services, anti-retroviral therapy.

INTRODUCTION

This review focuses on Adolescent Living with HIV (ALHIV). Adolescent has been defined as a translational stage that bridges the gap between childhood and adulthood [1]. According to literature, adolescent has been described as the period where most people develop biological, psychological, sexuality and psycho-social sensitivity [2]. Adolescence is typically a period of experimentation, new experiences, and vulnerability. As a result of sexuality exploitation associated with adolescents, access to sexual and reproductive health information and services has been prioritized and has become increasingly important [3]. Despite the recognized need for protection from HIV infections and other reproductive health risks, their age, social and economic status limit adolescent access to information and services in that context [4]. Sexually active life as part of adolescence continues with a high burden of HIV, therefore adolescence offers a window of opportunity to intervene early. Comprehensive data are vital to modelling accurate HIV-related messages and services before risky behaviours are formed and become entrenched [4].

Numerous global declarations and commitments, with specific goals and targets, have been made and set by world leaders and governments to respond to the HIV and AIDS epidemic since 2000 [5]. Most of the management policies and goals regarding adolescents are general in content, however; the United Nations General Assembly Special Session on HIV and AIDS (UNGASS) reports in 2001 explicitly included a target to reduce the prevalence of HIV in young people aged 15–24 years globally by 25% targeted in 2010 and to increase young people's access to crucial HIV prevention information, skills, and services in other to reach 95% of those in need [5]. In 2015, a report by the UN Secretary General's High-Level Advisory Panel on the Post Millennium Development Goals Agenda emphasized equity, empowerment, and engagement of adolescents and youth in strengthening of data as central drivers of revolution in their next development agenda [6].

Despite the goals, targets and global commitments for adolescents, the implications and accountabilities are rarely adolescents-targeted. Also, adolescent-specific data are limited which incurs a serious barrier to measuring and monitoring progress. Although the international reporting process recommends reporting on disaggregated data on adolescents and youth, little of these data are published in global or national progress reports [7a]. Consequently, compared with infants and adults, less is known about the burden of HIV and AIDS among adolescents and the situation progress to date in addressing their needs for HIV prevention, care, and treatment services.

Background and Significance

Globally, an estimated 35.3 million people were living with HIV as at 2012, 2.1 million, of these estimated number were adolescents aged 10–19 years, of which the majority were girls accounting for 56% of the total 2.1 million estimated [5]. The gender disparity has persisted over time, with this number plateauing over the past years. According to literature, majority of this adolescent HIV burden, entirely 85.0% are resident in Sub-Saharan Africa. Trend analysis regarding HIV survival rates indicate that age-related HIV/AIDS mortality is reducing for all age groups except that of adolescents [7a]. [5], which reported that about 300,000 new infections occurred among adolescents aged 15–19 years, which accounted for about 13% of the 2.3 million new infections globally. Along with the HIV/AIDS epidemic, a number of interventions and global goals have been agreed upon, notably to reduce the HIV prevalence in young people; to provide adequate information, life skills, health, and social services; and to implement policies to reduce young people's vulnerability [8]. Despite efforts, policy formulation and implementations, levels of knowledge of HIV among adolescents and young adults are appallingly low, especially in the worst affected countries; inconsistent compliance and poor practices of policies. Recent survey in countries with generalized epidemics [5], show that, in most of the countries, less than half of adolescent, aged 15–19 years, have a basic understanding of HIV. This falls far short of the 95% target agreed in 2001 at the UNGASS. Reasonably, the vision 'ZERO New Infections; ZERO Deaths; ZERO Discrimination' formed by UNICEF for their 2020 target face the same fate. These differences persist in nearly all countries with available data [5]. Global and regional averages can mask individual country progress. A number of countries show data of enhanced knowledge about HIV prevention. For example, Belarus, Guyana, Jamaica, Namibia, Rwanda, Serbia, Swaziland, Trinidad and Tobago, Vietnam, and Zimbabwe witnessed significant increases in knowledge about HIV prevention to levels above 50% among adolescent girls, and similar increases among adolescent boys in Rwanda and Namibia in the periods of 2010 and 2012 [7].

The life of ALHIV

ALHIV grow up in circumstances quite different from those of their other no-infected counterparts with both psychological, economic, social and sexuality challenge vulnerabilities

[4]. They have an urgent need for improved approaches to address their specific health care needs [1]. While several studies have explored in details the needs and challenges of adolescents [3],[4],[2], few studies have reported on the challenges ALHIV face in reality [9], [5]. Limited or no studies have explored the overall quality of life of ALHIV in terms of the five-fold needs in life (according to Abraham Maslow's theory of needs). Entirely all studies reporting on the life of ALHIV either talks about their social disadvantages, psychological vulnerabilities, environmental unfriendliness or compromised health status. Improving outcomes for adolescents and reaching global targets for an AIDS FREE generation by 2030 [10] will require evidence-based interventions and policies. However, there is a growing area of research in HIV and a considerable amount of efforts is still needed to inform the understanding of what works for this population.

Evidence indicates higher rates of loss to follow up [11], [12], and poor adherence [13], as well as increased needs for psychosocial support among ALHIV [14]. This population group continues to be underserved by current HIV services and have significantly worse access to and coverage of ART [6]. A number of care models have been designed over the years to improve health outcomes among this group of population.

HIV testing and Disclosure models

HIV testing is the key entry point for many HIV prevention interventions and is crucial for access to care and treatment [15]. Irrespective of route of HIV acquisition, underutilization of testing and counselling services (HTC) results in late diagnosis; increasing uptake of HTC consequently leads to early diagnosis and more effective care. Although reporting data on adolescents receiving treatment is limited, adolescents' access to and uptake of treatment is often reported to be lower compared to other age groups [16], [13]. It is urgent that ALHIV are recognized and signed-up in treatment interventions with clear and consistent linkages to care and support. Due to the increasing availability of antiretroviral therapy (ART) and prevention interventions, early diagnosis and linkage to care is able to reduce transmission and improve health outcomes [13], thereby decreasing adolescent morbidity and mortality. Although adolescents represent one of the wildest rising segments of the population to acquire HIV with diverse needs from those of children and adults, there is paucity of data focusing on this group [15]. Despite the fact that there are guidance on provider initiated testing and counselling (PITC), Voluntary Counselling Test (VCT) and prevention of mother-to-child transmission (PMTCT), these guidelines do not focus specifically on adolescents' issues [5], [17]. The development of WHO guidelines on adolescent HIV testing and counselling serves to fill an important gap which plays a critical role in prevention and treatment efforts [7a]. However guidelines recommended to assist policy makers to adapt to strategies for HTC among adolescents, cognitive, personal and a regulatory framework on informed consent based on adolescents' right; health-care decision-making requiring individuals to exercise their right to independent decision-making, may limit HTC service diversity and generalization.

Generally, studies of adolescents have found that disclosure has a significant association with improved clinical outcomes as measured by increased CD4 cell counts [18], decreased number of partners [19], and better linkage to care and adherence [20]. Disclosure decisions are often made to tell everyone (making HIV status a central attribute of one's identity), no one (requiring strategies for securing social support while remaining anonymous) or some people (requiring strategic decisions based on context) [21]. Knowing that disclosure decisions are central to personal identity, disclosure policies and strategies and as well as future researches should focus on communication strategies to present a coherent identity. Several studies have suggested disclosure strategies at different sites across different level including group counselling [22], structured support groups [23], one-on-one counselling, peer-led counselling

[24], community-based interventions with disclosure component [25], individual counselling based intervention [26], and online computer or mobile phone base intervention [27].

ART initiation and Linkage to care models

Following HIV diagnosis, several studies [13], [28] revealed that linkage to outpatient treatment, antiretroviral initiation, and longitudinal retention in care characterize the basis for successful management. Effective establishment of HIV treatment demands that HIV diagnosis is followed by timely linkage to outpatient care, prompt initiation of ART and prophylactic medications when indicated, and subsequent adherence to prescribed medications as revealed in individual studies [29], [30], [31]. Certainty of uptake and successful outcomes demands that, patients must progress through a sequence of steps taking into account environmental, patients predisposing factors, perceived and enabling factors as well as health behaviour models as proposed in a study by Ulett et al. [28].

Unfortunately for ALHIV, studies reporting on ART initiation following diagnosis and linkage to care have its bases and concept not specific to adolescents. On the demands of ART initiation programs and subsequent long-term retention and successful outcome as reported by Ulett et al.[28], the contributing environmental, personal and health models is not well documented among ALHIV. However, the emphasis rely more on adults and children [32], [12]. A study conducted in the USA by [33] highlighted areas that could be explored for targeted interventions resulting in earlier diagnosis, ART initiation, improved adherence and retention in care among HIV-infected adolescents and young adults. They conclude that although there have been significant developments in HIV prevention with pre-exposure prophylaxis (PrEP) and treatment as prevention for adults, these interventions have not been sufficiently investigated, tailored, or scaled for youth. Their cascade highlighted that current efforts for treating already-infected adolescents and young adults remain a challenge. Most interventions to address the cascade have been developed for adults. These are not particularly generalizable to youth struggling with identity formation, economic hardships, and unstable housing. Youth-focused interventions are necessary to improve the HIV cascade for adolescents and young adults.

Management and treatment models for ALHIV

A combination of factors interdependent on themselves comes to play when conceptualizing and contextualizing management models for ALHIV (Figure 1).

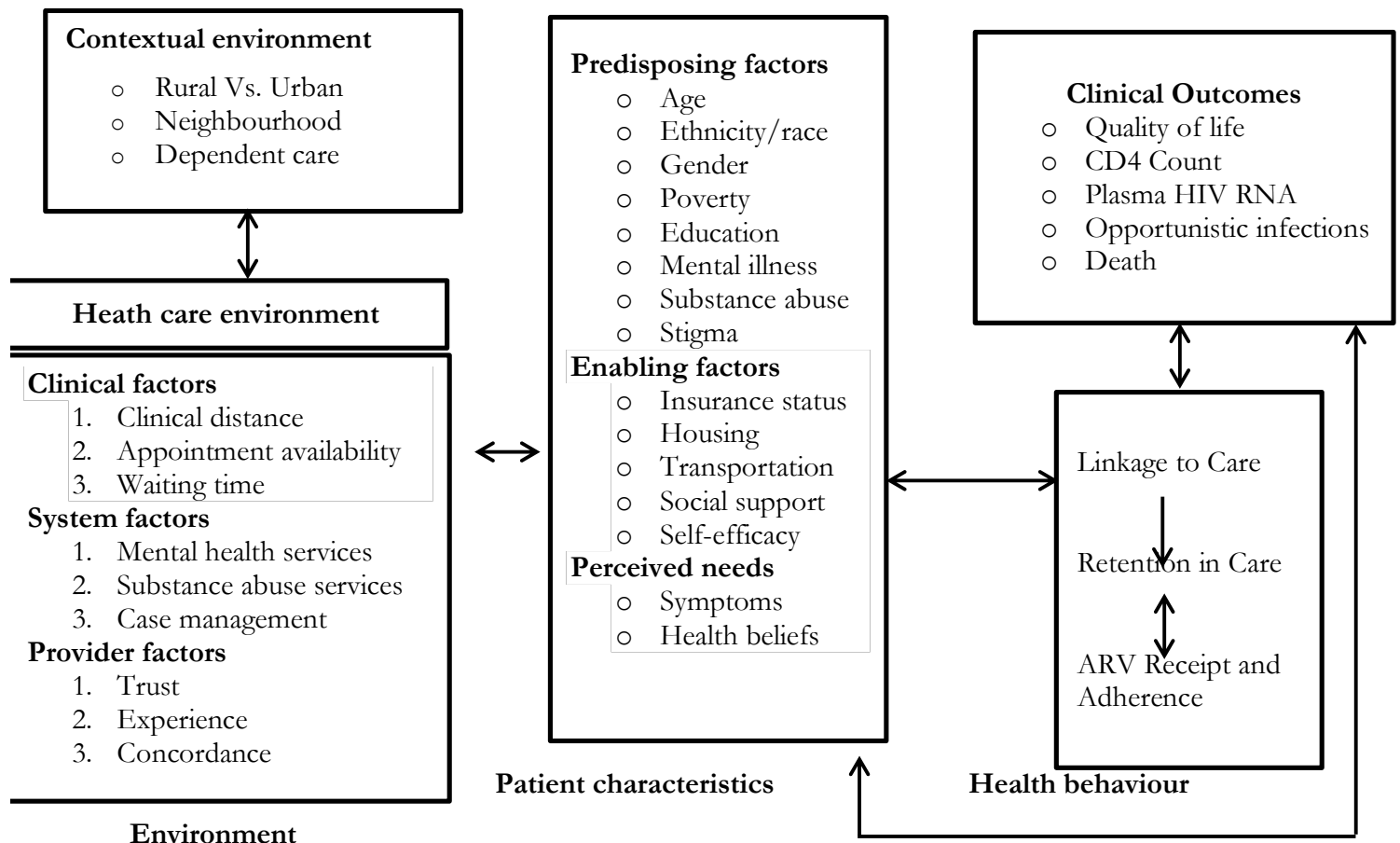


Fig 1.2 Adaptation of the behavioural model of health services operation to provide a theoretical framework to evaluate the relationships between patient characteristics, their background and health care environmental factors in contributing to health behaviours outlined in the “HIV management success” that ultimately influence clinical outcomes.

Source: Adapted from Ulett et al. (2009)

From literature search and WHO recommendations, two major intervention programs to support adherence to ART and retention in care included training of health workers and a range of community-based approaches. Adolescent management and care models for ALHIV happen to be one of the major areas mostly explored by researchers. Suggestions for improvements in services for ALHIV included age-appropriate support, material support (clothing, food, support for orphans), more protection from the damaging effects of stigma and discrimination, more comprehensive information about all the ways that HIV is transmitted, dedicated spaces and activities for ALHIV where they can be with peers who understand what it is like to live with HIV, and with educational opportunities for those who do not attend school [7a], [7b]. However despite effort made in the area of ALHIV care and management, age-disaggregated data on coverage of antiretroviral treatment (ART) among adolescents are lacking. Retaining adolescents in care is particularly challenging. Dealing with the prospect of lifelong treatment is daunting at any time in life, but for adolescent this comes on top of piloting the usual challenges of their developing maturity; emotionally, psychologically, physically, and sexually [5].

Revised theoretical model from reviewing literature

Despite significant HIV burden among adolescent and increased attention to integration of management services, there is uncertain evidence on the implementation of adolescent HIV management programs for adolescents living with HIV, nonetheless integrating such programs will improve outcome among ALHIV. Several studies have accounted for the successes of HIV clinics following the integration of secondary interventions such as peer support groups, mobile phone sections, community interventions [8], Adolescent Coordinated Transition (ACT) models [34] and family centred models [35].

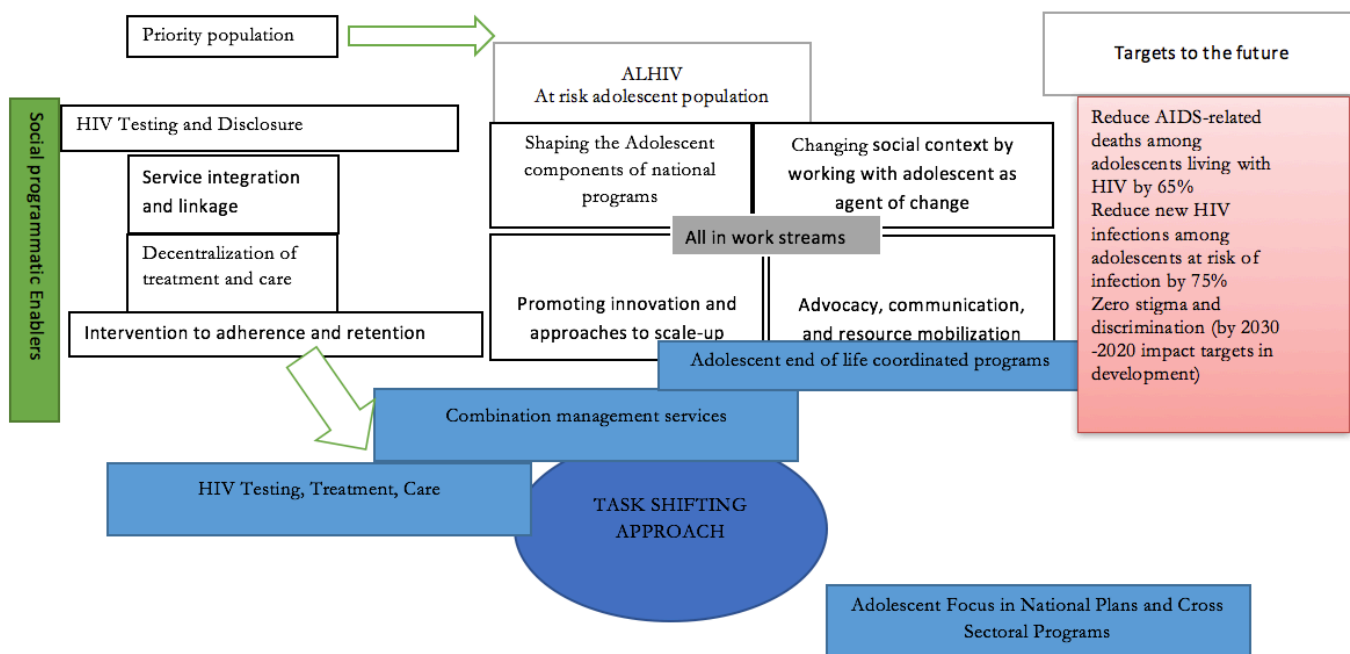


Figure 1.1: All in one strategic management model for ALHIV

RECOMMENDATIONS AND FUTURE DIRECTIONS

The physiognomies and requirements of adolescents cannot be addressed by applying guidelines based on evidence and recommendations relating to paediatric or adult populations. Moreover, adolescents themselves are not a homogeneous group. Physical and psychological (cognitive and emotional) development varies among adolescents, and differing social and cultural factors as well as their evolving capacities can affect both their ability to make important personal decisions and their access to services. For these reasons guidelines should take into consideration the range of adolescents' needs and issues surrounding their health. Again Stakeholders involved in clinical and operational research and policy formulation in adolescent HIV care can support the successful implementation of this task by actively engaging the adolescent and the established priorities and integrating them into their activities for adolescents.

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The State, Urban Displacement and Land Rights in Nigeria

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ABSTRACT

The issues of urban displacement and land rights question have become the attributes of modern Nigerian state. The Fourth Republic is characterised by the arrogation of land by government. The nationalisation of land remains a watershed in land matters across Nigeria. This is based on how such development precipitated the phenomenon of cities in crisis with attendant urban vulnerabilities and creation of informal settlements. The recurrent urban displacement across the country has aroused a sense of how the phenomenon of contesting the city has received inadequate scholarly attention. In fact, various works have not established the intersection between state's policies and urban crisis which raises a question of land rights in a nation that had customary land tenure prior to the 1978 Land Use Act. The demolition of so-called "illegal structures" has been a contentious issue owing to the fact that the process is usually characterised by controversies on whom or what determines an "illegal structure", and "illegal inhabitants". From Lagos to Owerri, Oyo, Ogun, Abia, Port Harcourt, to mention but a few extreme cases, where people living in the city and around waterfronts have been displaced; the issue of urban displacement remains prevalent. Using synthesised primary and secondary sources, this paper is a case study of state's leanings toward urban displacement. The government needs to review land laws and policies in order to promote urban cohesion, integration and cooperation from the various segments in the city especially the indigenous people rather than excluding and denying them access to the use of their land. The paper suggests that there is need to prioritise welfare and adequate compensation of identified real occupants of the affected structures as well as resettling the people residing at informal settlements. This paper concluded by asserting that, in order to prevent or manage conflicts and urban crisis, urban development or urban renewal projects should be carried out through a participatory approach and with appropriate resettlement programme for the occupiers or inhabitants of the proposed area or structure remarked for demolition or renewal

Keywords: Government, demolition, urban displacement, land rights, illegal structures.

INTRODUCTION

Recent events across the country show that the magnitude of population displacement in Nigeria has increased tremendously considering the contexts in which people are displaced and the growing number of displaced people has also grown many folds (Ibeanu, 1998). These

have manifested as a result of ethno-religious conflicts, oil spills and environmental degradation, resource control agitations, communal land related violence, the Boko Haram saga, kidnapping for ransom and now the state-urban renewal induced displacement that aimed at relocating illegal inhabitants or to demolish illegal structures. The foregoing sources of displacement made Ibeanu (1998) to argue that eradicating or managing the problems demands that the state must always rise above the interests of social groups, forging consensus and acting as a guarantor of the security of every group within its jurisdiction.

The Fourth Republic is characterised by the arrogation of land by the federal and state governments. The nationalisation of land remains a watershed in land matters across Nigeria. This is based on how such development precipitated the phenomenon of cities in crisis with attendant urban vulnerabilities and creation of informal settlements. The recurrent urban displacement across the country has aroused a sense of how the phenomenon of contesting the city has received inadequate scholarly attention. In fact, various works have not established the intersection between state's policies and urban crisis which raises a question of land rights in a nation that had customary land tenure prior to the 1978 Land Use Act. The demolition of so-called "illegal structures" has been a contentious issue owing to the fact that the process is usually characterised by controversies on whom or what determines an "illegal structure", and "illegal inhabitants". From Lagos to Owerri, Oyo, Ogun, Abia, Port Harcourt, to mention but a few extreme cases, where people living in the city and around waterfronts have been displaced; the issue of urban displacement remains prevalent. The most prominent example of urban factor in crisis and crisis management in Nigeria comes from Rivers state where Right Honourable R. O. Amaechi led Rivers State Government's urban renewal programme threatened the relative harmonious inter-group relations among the divers ethnic group. The plan to demolish all the water fronts in Port Harcourt largely occupied by the Ijo speaking people over the years in an effort to curb criminal violence currently threatening the goals of sustainable development in the Niger Delta. Against the background of riverine/upland dichotomy which inspired the agitation for the creation of Port Harcourt state, the Ijo challenged the programme on the basis that it will slow socioeconomic development in the hardest-hit developing riverine communities. This raises certain fundamental questions as to what rationale or template is applied by government officials to declare a structure or settlement by traditional people "illegal" and at which stage of the city's development. Most of the displacement is usually hinged on the need to transform the urban areas. Agbaje (2013:321) noted that urban renewal has always resulted into displacement of people from their residential and economic base, with remarkable factors like "the need to create new sets of states through territorial disaggregation, election of new party set of elite² into government, as well as the need to embark on major environmental and infrastructural development, such as road, rail construction, drainage, airport, markets." By implication, the state has been the hub of issues arising from urban displacement and land rights which affect its citizens. In fact, the advent of urbanisation has remained one of the main sources of internal displacement owing to the need for expansion of cities and towns across the country to accommodate new projects that would enhance development.

Some of these projects can be in the form of development infrastructure, construction of hospitals and educational institutions, building of markets and motor parks, construction of power lines in line with urban electrification, road construction and expansion, construction of flyovers and overhead bridges, dredging of rivers in cities, development of infrastructure for oil activities, among others.

According to Chekol (2017) increase in expense of labour also brought pressure to economise land including natural capital and the product flows produced by the natural product. Land

rights can be promoted in various ways. The actualisation of human rights in nations is intrinsically a collaborative endeavour that demands the active involvement of policy makers, civil society, community and religious leaders among others (Patel and Tyrer, 2011; Ishay, 2004). This makes it pertinent for this study considering the significance of land rights to the management of urban displacement.

The Land Use Act is a legal framework of ownership and use of land in Nigeria. Nigeria's land use law is traceable to the Rent Panel Report of 1976 which agreed that lack of immediate availability of land for use when required by stakeholders contributed to the obstacles to economic development and national progress; a situation that made the then Supreme Military Council to set up a Land Use Panel (Obasanjo, 1978:3). This explains why land is regarded as a vital instrument for political and economic concerns of the state (Chekol, 2017). The Land Use Act is a radical departure from precolonial land appropriation and different from what land ownership used to be in that era when ownership of land was the exclusive preserve of the king, with some privileges given to the chiefs, while individuals held parcels of land in trust for the community in some villages (Ogunniyi, 2016:357). The customary land tenure was highly effective to the extent that the Owa Clan (now in Ika North East Local Government Area, Delta State) restricted Agbor's right over the land used as trenching ground as revealed by the District Officer during the colonial era (NAI/B.P.1/1237/1939).

The promulgation of the Land Use Decree (now Land Use Act) granted government at all levels the right to assign or lease undeveloped land to people, and provided that the rural dwellers and urban residents have a right to use the land and also compensated if they require to give their land to government. However, this policy remains ironical in reality as recent events in contemporary Nigerian society showed that rural dwellers, owners of urban land, and occupants of land for industrial, institutional, and other purposes, have lost the portions of land they developed and occupied to the government's interest of using such land. This development has manifested in some cases without proper compensation or resettlement of the victims despite government's assurances at the onset/initial stage of land policy.

Since the promulgation of the land use Act, various indigenous people have been dispossessed of their land by successive governments that capitalised on developing projects for urbanisation with insufficient or no compensation. This has had adverse impact on the human rights of the victims and further explains "hostility and fear in social life" (Dollard 1938).

METHODOLOGY

The study employed the social surveyed research design through which primary and secondary data were implored in order to examine state's leanings toward urban displacement. Nigeria's urban bias scenario has been revealed by available data on how over 2 million people lost their homes and land to compulsory land acquisitions as at 2006, the eviction of more than a million people in Port Harcourt by oil companies, as well as the eviction of more than 500,000 people in Abuja since 2003. Most of these scenarios were occasioned by urban renewal projects and expansion works aimed at transforming Nigerian cities with little or no consideration for the less privileged that are victims of urban induced forced eviction.

LITERATURE REVIEW

Studies are replete with issues on state, ethical issues in urbanisation, urban challenges and land rights (Ilo, 2016; Musa and Abah, 2016; Okene and Uadiale, 2016; Ibrahim, 2016). However, most of these studies did not adequately capture urban bias and state's leanings toward urban displacement which occasioned illegal structure and illegal inhabitants controversies in Nigeria. Abuja, which hosts many government institutions, has been seen as

the hub of forced evictions since 1990s owing to what Levan and Olubowale (2014:388) described as “shifting government policies towards the area’s original inhabitants and laws governing the FCT’s 8,000 square kilometres perpetuate social inequality and discrimination.”

Apart from being an entity with territory, government and population, the state is the small organisation of the people who apply the use of force to secure obedience (Owolabi, 1999). In the Nigerian state, the use of force to enforce obedience manifests in the issuance of order by government to people described as illegal occupants or structures in urban areas. According to Ukase (2016), a common variable used to address urbanisation issues is the proportion of the total population of the area, either a nation, state, city, or town and the number of inhabitants remains significant in this regard. In his work on ethical issues in urbanisation, Ibrahim (2016) identified the impact of growing world population on urbanisation considering how the world has become more urban in the 21st Century than it was in the 1960s, as rural population has been overtaken by urban population. This trend is obvious. The high rate of rural-urban migration in many countries explains why more people now reside in urban areas as people consistently search for more sources of livelihood to actualise their human potential.

Similarly, Ilo (2016), underscored that unemployment is a social problem in most parts of Africa, to the extent that youth now migrate to cities in search of gainful employment especially in their bid to get white collar jobs. The high standard of living in urban areas like Port Harcourt, Owerri, Enugu, Lagos, Abuja, Kano, Benin City, Jos and many others also attract people to the city. According to Hove et al (2013:3), “the relatively high concentration of social services and potential employment opportunities in urban areas, together with the glamour of city life, are important factors attracting rural people to cities.” Albert (2003:58) identified the “speedy taking over of open public spaces in West African cities like Lagos and Abidjan by the underclass who usually function as street hawkers, pickpockets, drug dealers, touts” among others. This explains why most of these people easily become tools in the hands of criminals or enemies of the government.

Land tenure is the study of the relationship between men in the use and control of land resources (Oluwasanmi, 1966). This is the social aspect of land relations which determines and regulates the manner at which people own and access land for their productive use. In addition, land rights are inalienable entitlements to access land through inheritance, mortgage, lease and donation, without any intimidation or limitation. Land rights are not complete until the owner has the freedom to use a portion of land for any purpose at any point in time without any obstacle or litigation.

The need for equal rights made the people in Tanzania to use discourse of haki sawa to press for constitutional change and as means of engaging people in statutory reform and implementation of the Land Acts (Dancer, 2015:148). This equal rights to land access can enhance equity and stability of the society. Agwu, Amasiatu and Onuoha (2010:148) highlight the features of land rights in Nigeria thus, that both the Land Use Act and customary do not confer a woman the right to use, control or transfer land; splitting of land; discrimination of aliens from owning or controlling land as well as the politicisation of land claims. As seen from the aforementioned characteristics, it can be argued that land rights are not gender sensitive. The control of land has led to unusual pressure on land, even when some of those involved may not necessarily utilize it in a productive way to the benefit of mankind. According to Anene (1956:6), the increase of pressure on land has always been a source of discomfort to those affected. The inaccessibility to land across Nigeria has been caused by the existence of non-people oriented land law (Agwu, Amasiatu and Onuoha, 2010:147). This is due to

discriminatory role of the land use law which is not gender sensitive and also hampers usufructural right that would have promoted agribusiness.

Land has been described as the most concrete representation of property, which should be classified as part of the protectable rights (Amankwah, 2007). Socio-economic rights are protectable rights. Land rights are rooted in changing economic and political structures as well as the interpretation and transformation of meanings associated with access to common property resources (Bassett, 1993:16). The relevance of land rights explains why land owners have mineral rights so as to protect their interest (Lamp and Stolz, 2015:436). Given that land is generally accepted as the most precious of all commodities and its use and control has been the major determinant of the nature and structure of human societies and government since time immemorial (Udeke, 1995:45), most land related policies often affect citizens of a nation. Unfortunately, the regulatory efforts of government often negates the principles of rights guarantees as being the first to clear, plant or build on a land does not guarantee ownership. Obviously, land is a symbol of identity. Alidri (2016:5) has this to say about land in Uganda, thus:

Land (angu or nyaku) was considered a gift from the creator (Adro). It comprises the soil, water, animals, forests, hills and mountains, and valleys and plains, and rivers and streams. A mystical relationship existed between the clan and land. The narratives held the belief that resource management was intertwined with traditional religion and that the misuse of resources caused the wrath of the gods and ancestral spirits.

Land was regarded as a common resource in pre-colonial Angola, with a system of communal possession in which any member of the community had the right to cultivate parcels of land occupied by the community (Foley, 2007:6).

In The Republic of Vanuatu, constitutional guarantees provide that the rules of custom shall form the basis of ownership and use of land (Articles 73&74), and later strengthened by 2001 the Customary Land Tribunal Act which makes it illegal to alienate land (Jowitt, 2004:3). This is because land use is linked to a people's history and culture for continuity through time and space (Alidri, 2016:3). The foregoing reveals that custom is the regulatory framework of land tenure with constitutional backing, thereby giving the indigenous people the opportunity to appropriate land for different uses.

However, in the case of Nigeria, in colonial Lagos where there was customary land tenure, especially around the second half of Nineteenth Century, women needed to exercise constant vigilance to prevent men from encroaching on their rights to landed property; and notable was the case of Rokosi and Mary Mary Macaulay who went to colonial court in order to protect their right over land (Mann, 1991:695). This move was aimed at preventing the imminent threat of losing their landed property. After the Colonial Masters granted independence to the people, land was taken over by the government.

It is instructive that the 1902 Mineral Ordinance stated that lands in the protectorate were vested in the chief of the local communities in trust for the communities and also provided that in case of lands that belonged to the native community, the lease was to be granted by the chief with the approval of the High Commissioner. It further provided for the payment of compensation for damages on crops and buildings and a certain percentage of fees, rents and profit tax was payable to the land owners (Mangvwat, 1982 in Udeke, 1995:45). The foregoing is not obtainable in the current land laws regime which does not adequately address the aspirations and needs of land owners to the extent that compensation is not guaranteed. Thus, this raises a question of land rights in the context of justice and ethical issues of humanity.

In Igbo society, land is regarded as the domain of the earth goddess, a place to make a living and the most important asset to the people who are usually given the opportunity to gain rights over land (Iwuagwu, 2008:7). Similarly, the acquisition and possession of land is “often an indicator of class and position” like Angola where land tenure issues are related to broader questions of equity and governance enactment of with Land Law 1992 (Law 21-C/92) protecting local community land rights (Foley, 2007:5). Equity in this sense has to do with how land relations affect land rights.

CONCEPTUAL AND THEORETICAL EXPOSITION ON URBAN DISPLACEMENT AND LAND RIGHTS

An urban center is a relatively large, dense and permanent settlement of socially heterogeneous individuals (Wirth, 1938 cited in Onoja, 2016). An urban center is an area with social amenities and hosts people from all walks of life, different nationalities and ethnic groups, than rural areas that have little amenities and host majority of indigenous people. Most urban communities are more populated than rural areas which do not have high population rates. Industries and government’s institutions have large footprints in urban areas. This has made urban areas record traffic jams and congestion along various roads linking highways despite the construction of dual carriage roads. A notable attribute of urban areas is the use of public spaces by different classes of people and sometimes serve as sites of political protests or mobilisation of the masses especially middle class and the underclass in cities to challenge the decision of the state on crucial national issues like the use of the Gani Fawehinmi Freedom Square in Ojota Lagos as a gathering and mobilisation zone in January 2012 (Okolie-Osemene, 2017).

Urbanisation is regarded as the process of movement of people or process of human to the agglomerations in multinational settlements of relatively substantial size with features like population, law and order, efficient and planned housing schemes, infrastructural facilities such as good road, electricity, functional public health, planned environment/sanitation, schools, water systems, modern communication facilities, industries, markets and many others (Jibril and Abah, 2016). Urban displacement refers to a situation where inhabitants of landed property in the urban area are forced to leave their places of abode or settlements in the urban areas to other places they did not plan to reside in. This type of displacement is usually common in new states, developmental states or cities that are initiating new projects. Such displacement also occurs when new leaders or administration emerge in the affected areas. A notable attribute of directive to relocate is government’s proclivity for problematising the use of the affected places as residential areas.

As far as the state is concerned, urban displacement can be classified as forced or involuntary migration. This is based on the fact that the phenomenon causes sudden migration in search of another place of abode. It is a manifestation of what Ibeanu (1998) described as force-subject-migration reasoning. Implicit in this is the idea that force (war, conflict, drought, etc.) being an external factor affecting a person (subject) acts as a push factor leading to a rational, albeit coerced, decision to relocate. In essence, this urban displacement or eviction is far from having any linkage with positive motive to search for more livelihoods that would make life better for those affected.

Urban displacement is a phenomenon that is not only occasioned by conflicts or natural disasters but also caused by the state through urbanization policies. Contrary to the work of Ibeanu (1998), which highlights the causes of displacements like ethnic conflict, war, and drought, it is noteworthy that many are forced to relocate by government order. Most times,

the available alternatives offered by the government or found by the victims cannot be said to be their own original decision. However, it should be noted that urban displacement in the context of government's plan to demolish illegal structures and relocate illegal inhabitants has more to do with push factors considering city development agenda rather than pull factors that do not necessarily concern the people that have to migrate to other places in this regard. This type of displacement has different spatial dimensions like the order by the governor for occupants of a community or settlement to relocate to a new area mapped out for habitation, a new estate, new neighbourhood village, or even an order for traders to vacate their shops along roads in the city.

Theoretically, this article is anchored on urban bias theory, which focuses on the political power of urban elite, who influence the state to channel resources to the cities and exploit the peasantry, who are geographically dispersed, disorganised, and subject to the "free-rider" problem despite their large numbers (Lipton 1977; Weede 1996 cited in Jenkins and Scanlan, 2001:723). At last, the peasants are usually left at the receiving end considering how some of them who live in areas that attract government development or foreign investors are usually displaced, particularly those living around slums, shanties, illegal structures among others. For instance, Okene and Uadiale (2016:325) reveal that the phenomenon of land rights question which has the state and foreign investors as actors has manifested in the competition for African land and resources that now include countries in Asia with large populations of Arab nations that have abundant petro-dollars and other countries that are equipped with biofuel processing technology.

RESEARCH RESULTS: CASES OF URBAN DISPLACEMENT

The 1999 Constitution retained the vexing issue of the Land Use Act in Section 315 (d) and the Act passed in 1978 as the Land Use Decree under Obasanjo's regime has angered communities especially the marginalised minorities (Ihonvbere, 2000:97). Countless number of people has been displaced by government's demolition of illegal structures in many parts of the country particularly federal and state governments. This section presents the nature and conflict impacts of such displacement.

As a symbol of national pride, not many people are aware that the praises people pour out on Abuja, the Federal Capital Territory (FCT), for its clean city streets, relatively reliable electricity, and large middle class comes with a price (Levan and Olubowale, 2014). This price has manifested in the displacement of many groups and indigenous people for such urbanisation to be achieved over time. Most of these people have been pushed out of the main city to communities at the outskirts of the city where it will likely take many years before development gets there. In Lagos, Owerri, Aba and Port Harcourt for instance, many have suffered and are still suffering from the pain of urban displacement and abuse of their right to land. Since 2006, reports by different media sources reveal that roughly 2 million people had lost their homes and land to compulsory land acquisitions. More than 1.2 million people have been evicted from the Port Harcourt area to allow for development of the oil and gas industries, and since 2003 the government has evicted more than 800,000 people in the capital, Abuja.

Most times, one of the first steps taken by government is to map out an area for demolition, and followed by issuance of ultimatum for people to relocate. However, not in all cases that victims are compensated. The next stage is the arrival of bulldozers escorted by heavily armed security forces to protect workers on site in case of any attack by the people. Both eviction and demolition of structures by government are usually backed by the engagement of security

operatives in protecting people executing the order to avoid attack or aggression by the displaced citizens.

The cases of demolition in Lagos have shown that purchase of land is not an antidote after all. For instance, a victim of demolition at Minanuel Estate revealed that owners of the houses bought the land where the houses were built from the indigenes (Omoonile) who have been inhabiting Ogombo ever since their forefathers settled there (Akhigbe, 2016). The statement by Olakunle Bakare, the leader of one of the five families that originally owned the land is noteworthy as far as displacement and land rights are concerned, that government grabs land belonging to people because many are not aware of their right, even as government should not be seen as exclusive owner of land (Akhigbe, 2016).

As the spokesperson of the Nigeria Slum Informal Settlement Federation of Lagos State pointed out: "Government is not working with us to make Lagos a mega city but inflicting suffering on us" (Hanson, 2016). The statement was made to protest the plan to displace occupants of the water front communities across the state which has recorded a surge in criminal activities in recent times.

Demolitions as seen in most Nigerian cities have created what Levan and Olubowale (2014) described as housing insecurity in land laws and inconsistent policies. The market-driven economy of Nigeria lacks properly regularised land ownership or allocation system and this made urban poor to cater for their own accommodation, thereby "leading to the multiplication of slums and informal housing as the urban poor could only afford causing sub-standard houses" (Adekola, Allen and Tinuola, 2017:17). In fact, some residents of slums in urban areas have been implicated in criminal activities and accused of creating insecurity in the cities.

Categories of displaced people and purposes of demolition

Purpose of demolition	Victims/groups	Locations
Urban renewal/road dualisation	Traders	Traders' shops at Ijaiye housing estate, Jakande estate, Pen Cinema, Agege in Lagos, homes and shops in Aba, Oyo town, Owerri, Edo and others.
To eradicate crime	People living in city slums/settlements	Shanties/slums in many cities
Crime and insecurity	Waterfront communities	Structures at waterfronts including Otodo Gbame community, Lagos where more than 4,700 people were displaced and others in Rivers
Urban renewal	Estate residents/estate developers	About 5,000 housing units in Minanuel estate Abuja were demolished, Olokonloa Gardens estate Lagos,
To stop encroachment on government's land	House owners/residents	Gbagyi Villa Community Kaduna
To build institutions, barracks or oil installations, construct roads, bridges or drainage	Farmers, land owners,	Residential areas and Farmlands in urban areas

Source: Compiled by the authors from observation and media reports

Urban renewal problem tree

Internally displaced persons (consequence/outcome)

↕
Mass demolition (action)

↕
Poor planning and logistics (problems)

↕
Government intervention (actor/action)

↕
Urban slums (location/target)

Source: Adekola, Allen and Tinuola (2016).

As seen from the above table and problem tree, the purposes of demolition which climax in displacement of victims are urban renewal, eradication of urban crime and construction of institutions or roads. The attributes of mass demolition which leads to displacement are poverty, congestion, high crime rate, urban decadence, unemployment and poor housing (Adekola, Allen and Tinuola, 2016), due to hopelessness affecting residents in urban slums, estates and other quarters in the city usually caused by government's inability to either plan relocation or compensate the victims before or after demolition.

DISCUSSION WITH POLICY RECOMMENDATIONS

The land use law has become controversial because some people support the divesting of landowners without compensation by insisting that land is a free gift of God and so nobody should claim money for it, without remembering that much land was paid for by sweat and blood in first settlement, first clearing, conservation, and conquests or securing land (The Guardian, 2007:35). It is a mind boggling development as far as land right issue is concerned. The argument against customary land tenure, as noted by Okonkwo (2013:23), that "land became very exorbitant; more difficult to acquire even for the government, with land speculation and profiteers", cannot be said to have been addressed by government's land use law which even denies people right to make productive use of land.

However, as things are not what they seem, the purported rights expected to be preserved have consistently been denied or violated by the same law. Controversies surrounding the law explains why, thousands of lives have been lost and property worth billions of naira destroyed in inter-family, inter-communal and inter-ethnic wars over land since the enactment of the law; thereby portraying the Land Use Decree as a negation of human rights owing to deprivation and the losers emerging at the end of the whole event (The Post Express, 2000:6). Therefore, a repeal of a number of legislation including the Land Use Act of 1978, and the Petroleum Act of 1969, which disposes communities of their land, and by so doing, attenuate the pervasive penury in the Niger Delta will guarantee the freedom from want and fear, which are fundamental to human dignity. It is striking that the devastating aspect of the Land Use Decree on Nigerians is that those who are forced to relinquish their land for the public good cry home with empty or near empty hands (The Guardian, 2007:35). After the decree, the people lost land, and were left with brute labour which undermined agricultural production and food security because it cuts the bond of ownership that had motivated individuals into the hard work of manual agriculture in the past (The Post Express, 2000:6).

The occurrence of urban displacement has become one of the sources of crisis in Nigerian cities as people suddenly lose their places of abode due to emergence of new governments or new policies by serving governments aimed at what they call urban renewal, environmental rescue mission or programmes to create green surroundings in the cities. The issue of human rights

violations during demolition and displacement of people cannot be downplayed. Demolition of such structures violates people's right to shelter and also abuses their human dignity. Even the use of security operatives is a source of human rights violation because victims are sometimes harassed and even beaten by the security men that are supposed to protect them. This clearly poses an obstacle to public trust and confidence in the security forces. Confidence is further undermined by continuing human rights violations such as extra-judicial killings and sexual violence. With that mindset, trust and confidence are seldom found nor freely granted. These factors are now seen to be damaging the country's social fabric and its potential for sustainable development.

The fact that various governments through the ministries of Federal Capital Territory, physical planning, works and housing now set up demolition squad makes it pertinent to also establish a resettlement squad without playing politics with it. What to do with the displaced should be a priority of those implementing urban renewal programmes to provide adequate housing with basic amenities even before embarking on forced eviction or demolition of the illegal structures. This will save the nation from expending time and money in countering crimes that would arise from the displacement of people which has the capacity of driving them into hopelessness.

The federal and state governments as well as other relevant authorities should adopt more humane strategy in pursuing urban renewal agenda by partnering with stakeholders such as Town Planning Authorities, Association of Building Artisans of Nigeria (ASBAN), Landlords association, Shelter Watch and other non-governmental organisations to address the problems of illegal structures without forcefully displacing the inhabitants of affected places. The provision of new sites with structures for habitation will prevent people from suffering heart attack on hearing about demolition order and provide a viable way of life considering the fact that the gap between the privilege and the less privileged has increased since 2010 more than in the past due to the war of supremacy between unemployment and inflation. The Millennium Development Goals report is of particular concern, "without sufficient employment opportunities, many young people grow discouraged and worthless." Given that Nigeria is signatory to international conventions that provide for adequate housing, the government should invest largely in the area of community development and human security and avoid forcefully evicting people because women, children, old people and even retirees who are no longer in active employment are affected.

Obviously, the lack of proper city planning causes urban displacement, vacuum in several fronts ranging from security to livelihoods; rising high cost of living is one of the factors encouraging informal settlements. Inadequate compensation for the demolition of residents' structures remains a problem associated with demolition by government. The government needs to review land laws to promote urban reintegration which cannot be achieved when the groups that contributes to the development of industries and commerce are socially excluded. However, there is need to prioritise welfare and empowerment of identified real occupants of the affected structures as well as resettling the people residing at informal settlements. Empowered people are also more productive than and not restive as neglected people in the society.

CONCLUSION

This study has shown that urban displacement in Nigeria is a phenomenon that promotes forced and involuntary migration with attendant abuse of land rights at the detriment of occupants of landed property. Sufficient evidence suggests that the most debilitating demolitions are those involving shops and residential houses as seen in many towns

considering the attendant loss of shelter and sources of livelihood. This is because demolition of a man's house or shop is worse than fire razing down the building considering the possibility of rebuilding on the same land if the destruction involves fire incident. This article argues that the purpose of demolition, urban renewal or construction of public facilities, any demolition should be done after resettlement of the occupants of the affected structures in decent places of abode. The government should realise that forcing people out of their land or places they have paid for businesses without creating alternative solution to the problem of illegal structures rather portrays the policy makers as the enemies of the people. In the Niger Delta, there is a saying, "He who takes food out of your mouth is the one who kills you". With the context of the situation outlined and explained, countering strategies for transforming the socio-economic and political tensions and for sustainable development will require democracy without discrimination; participation and people-centred development agenda as well as sustainable human security framework to address the human security challenges responsible for "poverty-induced rural/urban migration".

The moment is ripe to access strategic ways in which human security and human development can be further incorporated into the urban management and transformation process. This will provide most people the opportunity to be empowered.

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Textual Analysis: Flex-Working Programs

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ABSTRACT

This study sought to explore how newspaper make sense of the flex-working programs in the Korean government, as well as what the focus of the newspaper articles about the flex-working programs are in terms of its content, terms frequently used, pictures, and headlines. To address, this research conducted a textual analysis based on newspaper articles which cover the flex-working programs derived from two English-language newspapers: The Korea Herald and The Korea Times. As a result, this research confirmed that these two newspapers similarly and mainly focus on problems regarding the current employment environment and work-family balance in Korea, as well as abstract necessities and expected positive outcomes of the flex-working programs. However, coverage in these newspapers did not focus strongly on the provision of detailed guidelines and significant information pertaining directly to use of the flex-working programs. Finally, this study confirmed that the implementation process for flex-working programs may well suffer from weak leadership and political support among public and private employers in the Korean workforce due to the absence of coverage of those critical issues. The other findings and limitations of this study were also specifically discussed.

Keywords: Textual Analysis, Flex-Working Program, Newspaper Coverage, Newspaper Content, Policy Implementation

INTRODUCTION

As a family-friendly workforce policy, two departments of the central government of Korea – the Ministry of Public Administration and Security (MOPAS) and the Ministry of Employment and Labor (MOEL) – have established and implemented in earnest three types of flex-working programs, flex-time work, part-time work and at-home work, since 2010. Initially, both the Korean government and its public officials expected positive outcomes (e.g., maintaining a balance between work and family, increasing opportunities for women’s careers, improving quality of life, increasing birth and employment rates, reducing time and costs for commuting, and so on) following implementation of the flex-working programs. However, only 2.28 percent of government employees at all levels of the Korean government (central, provincial and local government) applied for and used the flex-working programs in 2011 (MOPAS & MOEL, 2013), even though a number of government employees strongly believe in the necessity of the programs, as well as the beneficial effects of such a policy, which can resolve problems relevant to both the employment environment and work-home balance in Korea.

This research explores the relationship between newspaper coverage and implementation of the flex-working programs in the Korean government. Specifically, the following research questions are posed:

- 1) How do newspaper articles make sense of the flex-working programs? What is the focus of each of the newspaper articles about flex-working programs in terms of its content, terms frequently used, pictures, headlines, and so on?
- 2) How does newspaper coverage influence the low rate of usage of the flex-working programs in the Korean government?

To address these research questions, this study conducted a textual analysis based on newspaper articles which cover the flex-working programs derived from two English-language newspapers: The Korea Herald and The Korea Times. Finally, this study collected and analyzed 11 newspaper articles from The Korea Herald and 12 from The Korea Times that were published between 2004 and 2013. First, this study discusses context and background of the flex-working programs in the Korean government. Following this, the main findings of the textual analysis are specifically discussed. Finally, conclusions and limitations are stated at the end of the paper.

PROGRAM CONTEXT AND BACKGROUND

The Ministry of Public Administration and Security (MOPAS) and the Ministry of Employment and Labor (MOEL) established and implemented the flex-working programs in the Korean government. In theory, MOPAS and MOEL initially included nine kinds of flex-working programs (e.g., at-home work, telework, flex time, alternative work schedule, compressed work, discretionary work, core-time work, free-dress code, and part-time work), classified by workplace, time, method of work, dress, and type (MOPAS & MOEL, 2013). Among them, three programs – flex-time, part-time and at-home work – have been implemented and used with more positive results when compared with the other types of flex-working programs in the Korean government. Therefore, this study focuses primarily on these three flex-working programs.

The flex-time work program was first implemented as a pilot program at the Korean Intellectual Property Office in January 2001. Since August 2010, the program has been implemented and applied to the central, provincial and local governments in Korea (MOPAS & MOEL, 2013). A government employee is able to choose the time to start and end her/his work under the flex-time work program. However, an employee must work 8 hours per working day and 40 hours per week on a full-time work basis. Specifically, the program divides working hours into two time ranges, such as core time (10:00-16:00) and flexible time (07:00-10:00 & 16:00-19:00). Therefore, a government employee is able to flexibly select the time to start working, between 07:00 and 10:00, as well the time to finish her/his work, between 16:00 and 19:00. One important aspect of the flex-time work is that every government employee who uses the program must work during the core time (10:00-16:00) in order to improve cooperation and communication within an agency and with other governmental agencies (MOPAS & MOEL, 2013).

The part-time work program was first implemented as a pilot program in 2002. Since August 2010, the program has been implemented and applied to the central, provincial and local governments in Korea (MOPAS & MOEL, 2013). As mentioned earlier, government employees are classified into two groups, full-time (40 hours of work per week) and part-time (less than 40 hours of work per week), which is dependent upon work type. Specifically, a government employee who applies for and uses the part-time work program usually works between 15 and 35 hours per week. However, the program requires a part-time employee to work at least 3 hours per working day (MOPAS & MOEL, 2013).

The at-home work program was first implemented as a pilot program at the Korean Intellectual Property Office in March 2005. Since August 2010, the program has been implemented and applied to the central, provincial and local governments in Korea (MOPAS & MOEL, 2013). A government employee who applies for and uses the at-home work program is able to work from her/his home by using information and communication tools without commuting from home to the office every day. In order to use the program, employees first choose how many working days or hours they will work at home, as well as which portions of tasks will be completed at home. In general, either tasks which do not require face-to-face contact with the public or tasks which can be completed independently without having regular meetings or physical collaboration with other agencies or co-workers are appropriate for at-home work (MOPAS & MOEL, 2013).

The main purpose of establishing and implementing the flex-working programs is to maintain a balance between work and family, as well as improve the quality of an employee's life as a concrete example of a family-friendly workforce policy in the Korean government. Specifically, intended purposes and positive outcomes from the flex-working programs are as follows: 1) supporting job careers for married employees, especially for married female employees who need to spend more time caring for their children while continuing to develop their careers after giving birth; 2) improving equality between male and female employees in terms of balancing the number of male and female employees in higher positions in the workforce; 3) creating jobs for potential job seekers by implementing the part-time work program, 4) supporting employees' needs regarding self-development (e.g., language learning, education for advanced degrees, completion of certifications, and so on), as well as leisure activities in the early morning or late afternoon under the flex-time work program; 5) reducing time, costs, stress and fuel usage by allowing employees to work at home when feasible; 6) reducing organizational costs to maintain offices and other physical facilities; 7) enhancing job performance, job satisfaction and organizational commitment in public sectors; and 8) increasing birth rates as well as creating a more sustainable and employment-friendly labor environment (MOPAS & MOEL, 2013).

In this context, several intended users/ government employees of the flex-working programs are identified as follows: 1) government employees who need to spend time caring for their children while working simultaneously, as well as female employees who want to continue working after giving birth; 2) government employees who want to invest their time in self-development and leisure activities during the work day; 3) government employees who want to reduce the time, stress and costs which result from commuting every day; 4) government employees who want to have more time with their families; and 5) job seekers or potential government employees who have at least one of the needs identified above.

TEXTUAL ANALYSIS

Newspaper articles this study used include 11 newspaper articles from The Korea Herald and 12 from The Korea Times. The newspaper articles, which appeared between 2004 and 2013, are analyzed by content, terms, pictures and headlines contained in each of the articles, and which also serve as the article's primary focus. First of all, three subjects that these newspaper articles primarily focus on in their coverage of the flex-working programs are identified as follows: 1) problems and challenges regarding the current employment environment and work-home balance in Korea; 2) necessities and expected positive outcomes of the flex-working programs; and 3) information and structural details of the flex-working programs.

This research finds that in order to make sense of the justification for implementing flex-working programs, most of the newspaper articles give strong coverage to critical problems

that exist in the Korean employment environment. The first point made in the newspaper articles pertains to the critical problems of long work hours and heavy workloads (e.g., Korea Times, 06/14/2010; Korea Times, 07/04/2012; Korea Herald, 08/14/2012; Korea Herald, 12/13/2007). For instance, "The average Korean employee worked 2,193 hours in 2010, which translates to 43.2 hours per week. This comfortably represented the highest figure on the table as the OECD average came in at 1,749 hours for that year." (Korea Times, 07/04/2012) Several newspaper articles point out that the long annual work hours of a Korean employee is one of the critical obstacles to maintaining a healthy balance between work and family (e.g., Korea Times, 10/04/2010; Korea Times, 07/04/2012).

In addition, some articles reveal that the imbalance between work and family has considerably detrimental effects on women's continuous career development after giving birth, and the long work hours are more likely to discourage female employees over their male counterparts from entering into high-profile positions, such as executives and public managers (e.g., Korea Times, 07/31/2012; Korea Herald, 12/13/2007; Korea Herald, 05/19/2010). The final issue that the newspaper articles regard as a critical problem in the Korean employment environment as it pertains to work-family balance is Korea's distinct and hierarchical work structure, which can be likened to a top-down system of management rather than a horizontal system or the bottom-up approach found in Korean governments and some private companies (Korea Times, 06/24/2010).

In this context, most of the newspaper articles frequently pointed out multiple intended purposes as well as expected positive outcomes following implementation of the flex-working programs (e.g., Korea Times, 06/14/2010; Korea Times, 10/26/2010; Korea Herald, 04/23/2010; Korea Times, 08/25/2004; Korea Herald, 04/03/2011; Korea Times, 01/09/2013; Korea Times, 06/20/2012; Korea Times, 10/31/2010; Korea Times, 07/31/2012; Korea Times, 03/07/2013; Korea Times, 07/04/2012; Korea Herald, 08/11/2010; Korea Herald, 01/07/2010). Those expected positive outcomes are identified as follows: 1) work-life balance; 2) an increase in birth rates to prepare for an aging society; 3) reductions in energy usage, expenditures of time, and traffic congestion during commuting time; 4) the creation of more efficient work environments; 5) support of child care and other family issues; 6) support and encouragement of self-development and leisure activities; 7) the creation of part-time jobs; 8) the realization of gender equality in the workplaces, including support for the economic activities of working mothers and their re-entry into the workplace after giving birth; and 9) creation of support for more family-friendly and sustainable employee engagement in the workforce.

The third area of interest the newspaper articles focused on pertained to information and structural details of the flex-working programs. Only three newspaper articles among the 23 focused on information and structural details pertaining to the flex-working programs: 1) an employee's flexibility to choose a work schedule under the flex-time work program at public agencies (Korea Times, 08/25/2004); 2) telecommuters' work schedules under the at-home work program (Korea Times, 01/09/2013); and 3) the Seoul City Council's maternity program for pregnant employees (09/09/2011). However, newspaper coverage related to information and structural details pertaining to the flex-working programs, which government employees need to know in order to use the programs, was given very little coverage when compared with the other two areas of interest described earlier, namely: 1) problems and challenges regarding the current employment environment and work-home balance in Korea; and 2) necessities and expected positive outcomes of the flex-working programs. As a result, this study demonstrates that newspaper articles do not provide significant and positive content to

inform the public about the flex-working programs in detail and to encourage government employees to apply for and use the programs in the Korean workforce.

This research analyzes the headlines of newspaper articles and divides them into two groups: 1) headlines representing expected positive outcomes and needs for implementing flex-working programs (e.g., “Reward workers for work quality, not hours” (Korea Times, 06/14/2010), “W76 tril. Set aside for higher birthrate (Korea Times, 10/26/2010), “City employees to work at home” (Korea Times, 01/09/2013), “Minister calls for gender equality in workplaces” (Korea Times, 07/31/2012), “Right for family dinners” (Korea Times, 07/04/2012), “Flexible working to help women pursue careers” (Korea Times, 10/31/2010), “Don’t sweat, work smart” (Korea Herald, 08/11/2010), “Pregnant civil servants to get hour off” (Korea Herald, 09/09/2011), “KT expands smart working environment” (Korea Herald, 04/03/2011), and “Smart work system gains popularity in Korea” (Korea Herald, 03/14/2012)); and 2) headlines representing problems and challenges regarding the current employment environment and work-family balance in the Korean workplace (e.g., “Energy concerns lead to flexible working hours (Korea Times, 08/25/2004), “Lethargic society” (Korea Times, 06/20/2012), “Corporate culture stunts flextime” (Korea Times, 06/24/2010), “Only handful of firms tend to workers’ home needs” (Korea Times, 10/04/2010), “Korean women work longest hours in OECD” (Korea Herald, 12/13/2007), “Korea’s contribution to OECD and future challenges” (Korea Herald, 10/27/2009), “Underemployment” (Korea Herald, 01/07/2010), and “Are your employees ‘sustainably engaged?’ ” (Korea Herald, 08/14/2012)). According to the analysis of headlines, this research confirms that newspaper articles are more likely to focus on the positive effects of flex-working programs as well as current problems Korean employees face in the workplace rather than structural issues or policy procedures related to the flex-working programs.

In order to support the results, this research also analyzed terms which appeared frequently in the newspaper articles on flex-working programs. As a result, the following terms were identified: “work-life balance,” “glass ceiling,” “heavy workload,” “birth rate,” “aging population or society,” “flexible working hours,” “teleworking,” “smart work,” “women’s employment rate,” “family-friendly policy,” “unemployment,” “stress from the workplace,” “low efficiency at work,” and “quality of life.” Through frequent use of these terms, these newspaper articles emphasized justifications and policy needs regarding the Korean government’s implementation of the flex-working programs, as well as what Korean employees need in order to maintain a balance between work and family.

Three pictures are identified from these newspaper articles. The first picture is a woman’s lethargic facial expression due to a heavy workload and a great deal of stress at work (Korea Times, 06/20/2012). The second picture represents a group of workers who are moving to musical activities after work (Korea Times, 06/24/2010), and the third depicts a father and his daughter preparing for a family dinner (Korea Times, 07/04/2012). These three pictures similarly represent policy needs for flex-working programs in order to realize work-family or work-life balance and to achieve the goal of sustainable engagement in the Korean workplace. One newspaper article pointed out that implementation of flex-working programs is highly important because several issues that are specific to the Korean workplace (e.g., a hierarchical structure and an inflexible culture, especially in public sectors) need to be changed (Korea Times, 06/14/2010). In addition, the article raised questions about male employees’ need for flex-working programs as follows: “Based on some male workers’ experience, even if they leave work early to go home, there is no role he can play at home because children are studying all the time. When I talk to the 40s and late 30s generation, their key concern during the

weekends is they're having a hard time trying to organize something with the family." (Korea Times, 06/14/2010)

CONCLUSION

This study sought to explore how newspapers make sense of the flex-working programs in the Korean government, as well as which issues pertaining to the programs such newspaper articles have chosen to primarily cover. Based on 23 newspaper articles published in two English-language newspapers, The Korea Times and The Korea Herald, from 2004 to 2013, this study does not confirm any significant difference in usage of terms, tone or structure between The Korea Times and The Korea Herald in their coverage of the flex-working programs. In other words, these two newspapers similarly and mainly focus on problems regarding the current employment environment and work-family balance in Korea, as well as necessities and expected positive outcomes of the flex-working programs. In this context, primary content, terms used, and headlines featured in the 23 newspaper articles on flex-working programs reviewed are similar to one another.

However, as discussed earlier, coverage in these newspapers did not focus strongly on the provision of detailed guidelines and other information pertaining to use of the flex-working programs. Only 3 newspaper articles among the 23 very briefly describe contents of the programs. Specifically, newspaper coverage does not include the following: 1) how employees can apply for and use the flex-working programs; 2) the beneficial effects to both employees and employers upon implementing the programs; 3) how the government implements the programs to accomplish its intended policy goals more efficiently and effectively; and 4) how public managers or employers in the private sector manage and monitor employees who use the programs.

In the absence of coverage of these critical issues, newspapers to date have focused primarily on potential abstract and positive outcomes derived from the flex-working programs (e.g., family-friendly policy benefits, balance between work and home, employee career development, support for women's continuous career development and increased job opportunities, increased birth rates, and so on). In addition, these potential benefits and positive outcomes are primarily and directly relevant to employees rather than employers. Therefore, employers in private companies or public managers in the public sector are not necessarily likely to have clear and positive intentions to implement flex-working programs successfully in their organizations, and they may still have concerns regarding expected managerial challenges and negative outcomes resulting from implementation and usage of the programs.

As a result, the implementation process for flex-working programs may well suffer from weak leadership and political support among public and private employers in the Korean workforce. Consequently, only 2.28 percent of government employees in Korean governments applied to and used the flex-working programs in 2011, in part because coverage in newspaper articles did not provide necessary and critical details to both employees and employers, including specific information about how such programs work.

One of the limitations of this study is its range of data. The Korea Times and The Korea Herald are national newspapers in Korea. Namely, this research does not include newspaper articles on the flex-working programs published in provincial or local newspapers, since such newspapers are not published in English. Another issue to be addressed in future studies is the inclusion and analysis of newspaper readers' comments or responses about newspaper articles on the flex-working programs. If such information were included in future studies, it would be

possible to analyze different perspectives regarding the nature of the flex-working programs and their implementation in the Korean workforce.

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The study of bureaucracy in the administrative organizations of Iran (The Case of personnel of governmental organizations in Ahwaz city)

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ABSTRACT

This study represents an attempt to examine bureaucracy in the administrative organizations of Iran as a developing country. Therefore, this study aims to study how the bureaucratic structure of organization and its dimensions are in the administrative organizations of Iran. This study was carried out through the survey method. The data research have been collected by survey from a sample 400 person taken from the staffs population of 30 governmental organizations of Ahwaz through stratified cluster sampling. The results showed that bureaucracy in the administrative organizations of Iran is multidimensional and it can't be considered as an unitary concept. Also, six dimensions of bureaucratic structure form two high-order factors that are inversely correlated together. First factor is control including Hierarchy of authority, rule observation and formality in relations (impersonality). Second factor is expertise including job codification, technical competence and division of labor. Also, it was seen differences between western bureaucratic models and bureaucracy in the administrative organizations of Iran as a developing country.

Keywords: Bureaucracy, Organizational structure, Control, Expertise, Administrative organizations of Iran.

INTRODUCTION

In the present times, it's impossible to lead a social life without organizations; organizations that are formed based on social needs and play a significant role in operation of society and accomplishment of the development plans. Bureaucracy is one of the forms of organizing human activities to answer a certain need. Max Weber is one of the first theoreticians of organizational structure, who has emphasized on dominance of bureaucracy in comparison to other forms of organization. He suggested that the main reason for the advantage of bureaucratic organization has always been its purely technical superiority over any form of organization (Greth & Mills 1946:214). Nowadays though the idea that bureaucracy is the only way to operate big organizations gradually becomes obsolete, but still lots of bureaucracies exist in the world and have dominance over all human activities, from production and distribution to guidance and transportation systems and urban and rural issues even birth control regulations (Giddenz, 2003).

The aim of present article is to study bureaucracy and its dimensions in Iran's bureaucratic organizations. As most of developing countries, Iran has adopted its bureaucratic model from west. But not much is known about bureaucratic organizations of the developing countries, including Iran. Comparing to the bureaucratic organizations of the western countries, there have been few studies on bureaucratic organizations of the third world countries, and most of the studies have been carried out by western researchers and based on western organizations.

However, it is said that the western bureaucratic models are different from those of the developing countries' (Kanango, 1992). Hence we as a developing country must investigate that how is bureaucracy in Iran's organizations and does the bureaucratic structure of organizations in this country have any differences to the models of western organizations? In this regards, this article is an exploratory study to gain more knowledge on bureaucratic structures and its dimensions in governmental organizations of Iran, as a developing country. Berger (1975) believed that using the existing studies in west as guidance for studying the bureaucracy in other cultures will outline and show the limitations of these studies in reviewing the bureaucratic attitudes and behaviors in non-western and western societies. Therefore, studying the bureaucracies in developing countries, not only will show the bureaucratic structure in these countries, but also will help to show the differences between developing and western bureaucratic organizations and will generally add to our knowledge about these organizations .

Hence in order to undertake an exploratory study about bureaucracy and its aspects in Iran's administrative organizations as a developing country, this study will raise following question:

How dimensions of bureaucratic structure of administrative organizations in Iran are related?

To answer this question first the correlation matrix of dimensions of bureaucratic structure were reviewed and then for further and deeper investigations, we used the exploratory factor analysis. The theoretical basis of the present study is based on Max Weber's ideal theory of bureaucracy and conceptualization of Richard Hall of his theory.

THEORETICAL AND EXPERIMENTAL BACKGROUND

Basis of the studies carried out on organizational structure is based on bureaucratic theory of Max Weber. He presented an ideal type of organizational structure called Bureaucracy. According to his theory, bureaucracy is defined as a form of administrative organization designed to reach efficiency through rationalization of organizational behaviors (Meyer, 1972). According to Weber's theory, Organizational tasks are distributed among the various positions as official duties. The positions or offices are organized into a hierarchical authority structure. A formally established system of rules and regulations govern official decisions and actions. Officials are expected to assume an impersonal orientation in their contacts with clients and with other officials (Blau & Scott, 1962:32). Based on given characteristics by Weber, there is some puzzlement about conceptualization of bureaucracy in the literature of bureaucratic organizations. Blau and Scott (1962) and Blau and Marshal (1974) have named 5 main dimensions: Hierarchy of authority, division of labor (specialization), system of regulations (formality), impersonality (not having personal dependency), and recruitment and promotion based on technical competence. Following reviewing some studies, Hall (1963) concluded that there's an important agreement on main factors (Anderson, 1973). He(1963) identified 6 dimensions for bureaucracy based on Weber's theory: Hierarchy of authority, division of labor, rules and regulations, procedural specification, impersonality and technical competence. The present study also considers hierarchy of authority, division of labor, job codification and rules observation¹, impersonality and technical competence as the bureaucratic dimensions of an organization. These dimensions - which describe organizations as physical characteristics and personality of individuals- give us a basis by which we're able to measure and compare organizations.

1- Dimensions of job codification is similar to the procedural specification and dimension of rule observation is similar to the rules and regulations.

One of the most important issues in the bureaucratic literature is to define a Unitary or dimensional approach for assessing the bureaucratic structure of an organization. The primary works (Moeller, 1962; Udy, 1959; Berger, 1957) studied bureaucracy with a unitary approach. According to this approach, an organization is, or is not bureaucratic. Researchers who applied this approach believed that in order to define an organization as bureaucratic, we should be able to witness high degrees of all the dimensions of bureaucracy in that organization. But later, this approach was seriously questioned. It was said that all the dimensions of bureaucracy might not be present in an organization at the same time. Organizations are different in their degree of bureaucratization. Some dimensions can be stronger than others. Dimensions can be independent of each other. They can change independently from each other. Bureaucratic dimensions can create different configurations of bureaucracies (Hall, 1963; Bonjean & Grimes, 1971; Yucel, 1999). Anderson (1973, 1971) also discussed that sum of the scale scores is not acceptable for reaching a total grade for bureaucracy, because it might average out the important differences arising from one scale to another. Hence in 1960 decade, the unitary approach which described bureaucracy as a single dimension and as an absent-present dichotomy was gradually dismissed.

But in the dimensional approach, it's discussed that an organization can be bureaucratic in different ways. An organization can have high degrees of bureaucratization in some dimensions but not in some other dimensions. Bureaucratic dimensions can vary independent from each other. They do not necessarily converge together (Hall, 1963; Bonjean & Grimes, 1971; Anderson, 1971; Yucel, 1999). Berger (1957) had also reported few convergent changes among bureaucratic dimensions. Hall and Title (1966) and Bonjean and Grimes (1970, 1971) believe that the technical competence dimension is different from other bureaucratic dimensions and it has negative correlation with them. In some other studies (Anderson, 1973, 1971; Punch, 1969; Esherwood & Hoy, 1973; Yucel, 1999), researchers believe that division of labor and technical competence are two dimensions that are not convergent with the other bureaucratic dimensions.

They discuss that together, these two dimensions make the expertise which has a negative relation with control factor including hierarchy of authority, impersonality, rules and regulations (rules observation) and procedural specification (job codification). In fact, these studies recognized that 6 bureaucratic dimensions make two more general and specific factors that are negatively related to each other.

Esherwood & Hoy (1973) presented a four-fold typology of bureaucratic structures, based on these two general factors –control and expertise-. They calculated the means of two factors for each organization. Then, they compared the means of each organization on the two factors to the grand means of all organizations on the two factors. 1) If an organization possesses a low degree of control and expertise compared to the grand means of all organizations on two factors, it's called «Chaotic». In chaotic organizations, ambiguity and conflict are evident. The dominant source of power is political connections. Decisions are made in an irrational way and there's no coordination of activities. These types of organizations are unstable and desire to move towards another model. 2) If an organization has a high degree of control and low degree of expertise compared to the grand means of all organizations on two factors, it's called «Authoritarian». In this model a bureaucratic authority is applied at the expense of technical considerations. Authority is centralized at the higher levels of hierarchy. Rules are enforced to assure compliance. Rules are enforced in an impersonal way. Those who are loyal to superiors are promoted or approved of. Obedience of the staff is most emphasized. Objectives are clear and known and decisions are overly rational. 3) If an organization has a low degree of control and high degree of expertise compared to the grand means of all organizations on two factors,

it's called «Collegial». In this model, decision-making is granted to the members of the organizations. Rules and regulations are considered as guidelines. People are trusted and goals are not important. 4) If an organization has a high degree of control and high degree of expertise compared to the grand means of all organizations on two factors, it's called «Weberian». In this model, bureaucratic and technical characteristics complete each other. This study also uses this four-fold typology as an analyzing tool to understand Iran's governmental organizations. The aim of using this typology was to define rather homogenous groups of employees on control and expertise factors which present us different types of organizational bureaucracies. Figure 1 shows two factors and 4 types of bureaucracies. Since in this study, the bureaucratic dimensions of organizational structure is the perception of employees from these regulations in the organization (refer to measurement section), it must be said that in fact this typology is a classification of perceptions of employees of bureaucracy of the organization.

Figure 1 The Classification of employees ' Perceptions of Bureaucracy(Cited by Yucel,1999)

	Low expertise	High expertise
High control	Authoritarian	Weberian
Low control	Chaotic	Collegial

METHODOLOGY

This research was carried out through the survey method. The sample of this research includes 400 persons(390 useful individuals), that was determined from statistical population employing Krejcie and Morgan's table of determining sample size (1970). The sample members were drawn from all employees in 30 governmental organization, affiliated by the management and planning organization in Ahwaz, capital of Khuzestan, a Province in south west of Iran. Out of 11 manufacturing organizations, 2 organizations and from 19 socio-public organizations, 3 organizations were randomly selected. A classified cluster sampling method has been used to select the samples. Main instrument of data collection used in this study was questionnaire. The validity of the scales were attained through content validity procedure and the opinions of the judges. Reliability of the scales were calculated by Cronbach's Alpha. Also to test the scales, a pretest was done with 50 individuals from the statistical population.

Measurement

In the studies related to bureaucracy, two approaches are used to measure the bureaucratic dimensions. One alternative is the perceptions of organization participants of Bureaucratic characteristics of organizational structure. The other is the structural characteristics themselves. Hall(1962, 1963) believes that the first one is appropriate approach to measure Bureaucratic characteristics of organizational structure. Because the use of objective measures ignores intraorganizational variation which may be significant both horizontally and vertically. Hence in this study, scales are perceptions of people of bureaucratic dimensions of the organizational structure.

Hierarchy of Authority (**HA**): it means the freedom provided for the members of an organization to undertake their specific tasks without interference of higher level authorities (Aiken&Hage, 1966,1967). In this study we have used Aiken and Hage's scale of hierarchy of authority(1966). Hierarchy of authority is one of the important dimensions of organizational centralization. This scale has 5 five-point Likert-type items and the answers consisted of "completely wrong", "Wrong", "Almost correct", "correct", and "completely correct". The Cronbach's alpha for this scale is 80%.

Rules observation(RO): rules observation reflects the degree to which employees are observed for rule violations(Aiken&Hage, 1966;Hall, 1997). In this study we have used the scale developed by Aiken and Hage (1966). This scale has 7 five-point Likert-type items and the answers consisted of “completely wrong”, “Wrong”, “Almost correct”, “correct”, and “completely correct”. The Cronbach’s alpha for this scale is 60%.

Job codification(JC): job codification reflects the degree to which job incumbents must consult rules in fulfilling professional responsibilities(Aiken&Hage, 1966; Hall, 1997). In this study we have used the scale developed by Aiken and Hage (1966). This scale has 7 five-point Likert-type items and the answers consisted of “completely wrong”, “Wrong”, “Almost correct”, “correct”, and “completely correct”. The Cronbach’s alpha for this scale is 79%.

Impersonality(FRM): It is the extend to which both organizational members and outsiders are treated without regard to individual qualities(Hall,1968). In this study we have used the scale advanced by Yucel (1999). This scale has two factors. (1) Formality is the degree to which interactions among people are formal and free from emotions. (2) Friendly climate is the degree to which relations in the organization are friendly and warm(Yucel,1999).

But Yucel suggests that the friendly climate factor is rather a non-structural and non-bureaucratic factor. Therefore, since the friendly climate factor is non-structural and non-bureaucratic factor, it was omitted from this study. Formality scale has 7 five-point Likert-type items and the answers consisted of “completely wrong”, “Wrong”, “Almost correct”, “correct”, and “completely correct”. The Cronbach’s alpha for this scale is 70%.

Division of Labor (functional specialization)(DL): it is the extent to which work tasks are subdivided by functional specialization within the organization (Hall, 1968). Functional specialization means dividing labor to the specific, simple and repetitive responsibilities. (Robinson, 1997: 82&262). In order to develop a scale for division of labor in this study, at first, some items collected from previous studies (i.e. Hall, 1961; punch, 1967; Mckay, 1964; refer to Yucel, 1999) were selected by the opinions of the judges; then after pretest studies, suitable items were chosen. This scale has 4 five-point Likert-type items and the answers consisted of “completely wrong”, “Wrong”, “Almost correct”, “correct”, and “completely correct”. The Cronbach’s alpha for this scale is 60%.

Promotion based on technical competence(TC): It is the extent to which organizationally defined "universalistic"standards are utilized in the personnel selection and advancement (Hall, 1968). In this study, in order to develop a promotion scale based on technical competence, at first, some items collected from previous studies (i.e. Hall, 1961; punch, 1967; Mckay, 1964; refer to Yucel, 1999) were selected by the opinions of the judges; then after pretest studies, suitable items were chosen. This scale has 6 five-point Likert-type items and the answers consisted of “completely wrong”, “Wrong”, “Almost correct”, “correct”, and “completely correct”. The Cronbach’s alpha for this scale is 82%.

RESULTS

The samples that participated in the present study consisted of female (22.4 percent) and male (77.6 percent). The respondents' age range varies from 21 to 58 years old, and the respondents' age average out at 40.21 years. 18.3 percent of the respondents were high school diploma or less than that, where as 67.1 percent of them hold bachelor degrees and only 14.7 percent hold master degree and above. The organization position of the sample was further drawn into the 10.6 percent managers, 63.4 percent professionals and 26 percent clerical personnel.

Table 1 Correlation matrix for Six Bureaucratic Dimensions

Dimension	Mean	Std. Deviation	HA	RO	JC	FRM	DL	TC
HA	3.64	0.81	1					
RO	3.38	0.51	0.42**	1				
JC	3.52	0.72	0.09* -	0.02	1			
FRM	3.02	0.66	0.24**	0.15**	0.16** -	1		
DL	2.89	0.66	0.03	0.09*	0.16** -	0.05	1	
TC	2.52	0.87	0.29-**	0.22** -	0.37**	0.30** -	0.21** -	1

*<0.05

**<0.01

Table 1 shows the mean, standard deviation and Correlation matrix between the bureaucratic dimensions of organizational structure. As it's obvious, bureaucratic dimensions change independently and we can't consider them as a unitary concept. There are positive relations among hierarchy of authority, rules observation, formality of the relations and division of labor. But on the other hand, these variables have negative relations with technical competence and job codification. Also the relation between job codification and technical competence is a positive and significant relation. Generally according to the table, we can say that in this case, there are two sets of variables that are inversely correlated together. Dimensions of technical competence and job codification have negative relations with the dimensions including hierarchy of authority, job codification, rules observation, formality of the relationships and division of labor. Among these dimensions, perceptions of employees of hierarchy of authority in the organization has the highest level (mean= 3.64). And perceptions of employees of technical competence in the organization has the lowest level (mean = 2.52). All the correlation coefficients among the dimensions are significant, except correlation between rules observation and job codification, division of labor and hierarchy of authority, and division of labor and formality of relationships .

By reviewing table 1, we could conclude the following points:

- 1) When hierarchy of authority is stronger in an organization, rules observation will increase.
 - 2) Stronger hierarchy of power in an organization will increase the formality of relationships in the organization.
 - 3) When hierarchy of power is stronger, job codification becomes weaker.
 - 4) When hierarchy of power is stronger, technical competence is less.
 - 5) When rules observation is stronger, formality of the relations in an organization will increase.
 - 6) When rules observation is stronger, division of labor will increase.
 - 7) When rules observation is stronger, technical competence will decrease.
 - 8) When job codification is more detailed, formality of relationships will decrease.
 - 9) When job codification is more detailed, division of labor will be less.
 - 10) When job codification is more detailed, technical competence will increase.
 - 11) When the formality of relationships in an organization increase, technical competence will decrease.
 - 12) When division of labor increases, technical competence will decrease.
- Also the results show that the strongest correlations exist between hierarchy of authority and rules observation, and between technical competence and job codification.

Table 2 Factor Analysis of Six Bureaucratic Dimensions.**-1:Total Variance Explained Table 2**

Kmo= 0.614

bartlett's test=249.431

sig=0.000

Component	Initial Eigenvalues			Extraction sums of squared loadings			sums of squared loadings Rotation		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.982	33.029	33.029	1.982	33.029	33.029	1.685	28.082	28.082
2	1.260	20.998	54.027	1.260	20.998	54.027	1.557	25.945	54.027
3	.946	15.761	69.787						
4	.765	12.751	82.538						
5	.536	8.926	91.464						
6	.512	8.536	100.000						

Table 2-2:Rotated Component Matrix(Varimax)

	Component	
	1	2
	HA	.828
TC	-.432	.669
DL	.066-	-.592
RO	.776	.069
JC	.010	.783
FRM	.451	-.377

Table 2 shows the results of the factor analysis of six bureaucratic dimensions. In table 1-2 we can see the total explained variance, initial eigenvalues, eigenvalue of extracted factors with and without rotation. As you can see, the 1 and 2 factors that have greater eigenvalues than one remain in the analysis. The remaining factors explain about the 52% of the total variance. After rotation of factors, the first factor explains about 28% and the second factor explains about 26% of the variance. According to table 2-2 we can find out that 6 bureaucratic dimensions form two high-order factors. The first factor includes hierarchy of authority, rules observation and formality. This factor is called control. The second factor includes job codification, technical competence and division of labor. This factor is called expertise. As you can see, contrary to job codification and technical competence, division of labor has negative loading on the expertise. It can be said that although division of labor loads highly on the expertise, but it is at the opposite end of the factor continuum when it is compared to two dimensions job codification and technical competence. Also table 3 shows Pierson's correlation between two high-order factors, expertise and control. As you can see, since the $r=-0.24$ and $sig=0.000$, there's a significant and negative relationship between expertise and control. That is, the higher the degree of control in the organization, the lower the degree of expertise in the organization.

Table 3: Pearson's correlation coefficient between expertise and control

Sig	r	
0.000	-0.24	expertise and control

Table 4 shows a quick cluster analysis of the scores of employees on two factors, control and expertise, results in 4 specific groups of employees. For this, we have used K-mean cluster analysis. The K-mean cluster analysis is a method used when a theory exists about number of clusters. By this method we can provide means for each cluster on control and expertise. The first cluster is called Weberian. There are 84 employees in this cluster. Control mean in this cluster is 3.64 which is higher than the overall mean of control for all employees (3.34); and

expertise mean in this cluster is 3.30 which is higher than the overall mean of expertise for all employees (2.99). The second cluster is called collegial. There are 102 employees in this cluster. The control mean in this cluster is (2.87) which is lower than overall mean of control for all employees (3.34); and the expertise mean in this cluster is 3.33 which is higher than overall mean of expertise for all employees (2.99). The third cluster is called authoritarian. There are 61 employees in this cluster. Control mean in this cluster is 4.01 which is higher than overall mean of control for all employees (3.34); and expertise mean in this cluster is 2.54 which is lower than overall mean of expertise for all employees (2.99). The fourth cluster is called chaotic. There are 112 employees in this cluster. Control mean in this cluster is 3.22 which is lower than overall mean of control for all employees. Expertise mean in this cluster is (2.67) which is lower than overall mean of expertise for all employees (2.99). A great number of employees are in this cluster. This means that perception of the most employees of bureaucracy of administrative organizations is chaotic bureaucracy.

To assess the significant difference among these four groups of employees on control and expertise factors, we have used ANOVA. Hence, two ANOVA's have been undertaken. In the first one, we have considered control as the dependent variable and in the second one, expertise has been considered as the dependent variable. And in both of them, four clusters have been used as independent variables. As evident in table 5, both ANOVA's have been confirmed with a level of confidence lower than 0.99. It means that there are significant differences between four clusters on control factor. The mean of control was highest for employees in the authoritarian cluster followed by weberian, chaotic and collegial clusters. Also there were significant differences between four groups on expertise factor. The mean of expertise was highest for employees in the collegial cluster followed by weberian, chaotic and authoritarian clusters in this order. It must be noted, although most of the employees of this study is grouped in the chaotic category of bureaucracy, but the level of control and expertise in these organizations is not very low and it's less likely that the employees feel that there's anarchy in the organization. Because the control mean in the chaotic group is higher than control mean in the collegial group. Also the expertise mean in the chaotic group is higher than the expertise mean in the authoritarian group.

Table 4 Quick Clusters of Cases Based on Two factors.

factors	Final cluster centers				Total
	Weberian 1 N=84	Collegial 2 N=102	3Authoritarian N=61	4Chaotic N=112	N=359
CONTROL	3.64 High	2.87 Low	4.01 High	3.22 Low	3.34
EXPERTISE	3.30 High	3.33 High	2.54 Low	2.67 Low	2.99

Table 5 ANOVAs for Control and Expertise factors by Clusters.

Dependent variable	Mean	SD	Source	Sum of Squares	df	Mean Square	F	Sig
CONTROL	3.34	0.47	Between Groups	59.13	3	19.71	307.08	0.000
			Within Groups	22.78	355	.064		
			Total	81.91	358			
EXPERTISE	2.99	0.42	Between Groups	43.16	3	14.38	232.08	0.000
			Within Groups	21.95	355	.062		
			Total	65.11	358			

CONCLUSION

This research was undertaken to study bureaucratic dimensions of structure of Iran's administrative organizations, as a developing country. Results of the internal relations among bureaucratic dimensions of Iran's administrative organizations showed that in the administrative organizations of this country, bureaucracy is multidimensional and we couldn't consider it as a unitary concept. Iranian employees reported a high level of hierarchical authority in the organization. Also they perceive that promotion in these organizations is not based on technical competence. The results of correlations matrix of bureaucratic dimensions showed that the dimensions of technical competence and job codification are reversely related to hierarchy of authority, rules observation, formality and division of labor. According to the results of correlations matrix, it seems that there are two sets of variables which are reversely related to each other. Findings of the factor analysis showed that 6 dimensions of the bureaucratic structure form two high-order factors. First factor is control including Hierarchy of authority, rule observation and formality in relations. Second factor is expertise including job codification, technical competence and division of labor. Both factors are reversely related to each other. This means that when control increase in the organization, expertise decrease. As you could see, findings of the present study are to some extents different from the results of western studies. Western studies claimed that two dimensions of division of labor and technical competence make the expertise factor which is reversely related to the control factor that includes 4 dimensions of hierarchy of authority, formality, rules observation and job codification. Also in the present study 6 dimensions of the bureaucratic structure make two high-order factors, control and expertise which are reversely related, with this difference that, in the present study, the expertise factor includes three dimensions of technical competence, division of labor and job codification. The control factor includes three dimensions of hierarchy of power, rules observation and formality. Because the most variance of job codification variable has not been explained by control factor, but by expertise factor. There was no negative relation between job codification and technical competence, but their relation was significant, positive and strong. On the other hand, the relation of job codification with hierarchy of authority, impersonality and division of labor is negative. Of the other differences of this study's findings, we can mention the division of labor variable. Similar to the findings of Anderson 1973, Eisherwood & Hoy, 1973, Yucel, 1999 and also in the present study the division of labor was loaded on the expertise factor, but in the present sample, its relationship with expertise is negative. This means that the stronger the division of labor is, the expertise will decrease. Also there's a reversed relation between division of labor and job codification and technical competence, which have a positive relationship with expertise factor. This means that the more the division of labor in the organization is, job codification and technical competence will decrease. Hence, contrary to the findings of studies by Anderson, 1973; Eisherwood & Hoy, 1973; Yucel, 1999, the more the activities of the organization are organized on functional specialization, the fewer employees would regard technical competence and expertise, as required by promotion. It seems that the reason for this is partially due to differences in forms of specialization in different organizations. It could be said that the specialization that in line with technical competence, leaves a positive impact on expertise factor, is more a social professionalism -division of labor based on expertise and skill of individuals- rather than a functional specialization. By functional specialization, employees accomplish few numbers of professional tasks and the type of work is specific, simple and repetitive. When the tasks are divided on functional specialization, it means using human resources to do specific, simple and repetitive responsibilities. Employees, especially those professional ones who have attended professional training courses, will not much be able to use their skills and expertise in their tasks. While in social specialization, tasks are organized on the expertise of individuals, and they are assigned with a broad range of authorities to accomplish their related tasks (Hall, 1999). Since lack of balance between expertise of

employees and the tasks assigned to them, is one of the common problems in the administrative organizations of the developing countries, it seems that in the present sample, tasks have been organized mostly on functional specialization.

About job codification, it suggests that the reason for its difference can also be due to different job codifications in several organizations. Job codification can be viewed as "coercive" when rules limit workers' rights to exert significant control over their work activities. On the other hand, job codification can be viewed as "enabling" when it provides needed guidance and clarifies job responsibilities, thereby reducing role ambiguity (Sarros et al, 2002). In the present sample, it seems the job responsibilities are ambiguous and not detailed. Thus not only job codifications are as coercive, but it's assumed that in order to accomplish their tasks professionally, employees are in need for detailed information and clear codifications of their responsibilities and activities. Kanango (1992,1981) believes that in the organizations of the developing countries, job codifications have not been clarified for the employees. Therefore, a problem called "ambiguity in jobs and responsibilities" emerge. In this situation, due to lack of efficiency of information sharing system, and weakness of the organization in regulation of job codifications, employees don't have a clear recognition of their job, its objectives and their professional responsibilities. Also the difference between job codification and rules observation in this case, shows that although the job codifications have not been fully clarified for the employees, they are monitored to abide by these ambiguous rules.

According to the positive relations between hierarchy of authority and rules observation, and the negative relations between hierarchy of authority and job codification, it can be suggested that one of the reason why employees face ambiguity in rules and job standards, is that they don't have a role in enacting these rules and job standards, or can't influence them. This is while on the other hand, they are monitored to abide by these ambiguous rules. As Korman points out (1991) when those who define norms and criteria are originally outsiders, that's when problems occur, because norms and criteria mostly mirror the ideas of the one who has defined them. On the other hand, the positive relation between job codification and promotion based on technical competence shows that the more clear and detailed criteria and norms are, the more the promotions will be done based on technical competence. This reveals that when rules and criteria are clear and detailed, organization will be more successful in presenting a clear image of criteria for remuneration and promotion to the employees. And employees will have a clearer understanding of how they'll be promoted based on technical competence. But as Kanango (1992) states, most of the organizations of developing countries suffer from lack of a suitable and efficient evaluation system. In these organizations, there is no justice as well as the evaluation system and its criteria are ambiguous.

Also in this study, employees have been categorized in four clusters (Authoritarian, Weberian, Collegial and Chaotic) on Control and Expertise factors. In this sample, a larger number of employees were in the chaotic cluster. In the chaotic cluster, employees experience low degrees of control and low degrees of expertise in the organization. As mentioned before, in chaotic bureaucracies, ambiguity and contradiction are evident. The dominant source of authority is political connections. Decisions are made in an irrational way and there's no coordination of activities. Such organizations are unstable. Although it must be mentioned that it's less likely that the employees of these organizations feel that there's anarchy in the organization, because the level of control and expertise in these organizations is not very low. These results are also similar to the results of Yucel's study (1999) on bureaucratic structures of schools in Turkey.

Nevertheless we must mention that: the internal relations among bureaucratic dimensions in Iran's governmental organizations are rather different than the results of western studies. However there's a need for more studies in non-western countries and cultures, because such studies in non-western and developing countries are few. Studing these relations in different countries and cultures and comparing them to each other will reveal the more differences between western and non-western bureaucratic structures. And since the model of bureaucratic organizations were originally developed based on western studies in western countries, assessment and comparison of organizational structures in different countries and cultures will undoubtedly add to our general knowledge about organizations.

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Social Changes And Conflicts In Orang Sekaum In The North Halmahera Peace Zone

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ABSTRACT

The civilization of "*orang sekaum*" (ethnic Tobelo) in its development, follows the dynamics of social change that leads to social conflict. Conflict and violence between brothers in "*orang sekaum*" gave birth to two different poles in a vulgar way (Islam vs. Christian). The process of social change and the development of "*orang sekaum*" is characterized by a climate of social life that previously lived in a harmonious and peaceful state, turned into conflict between brothers in the peace zone. Communities are provoked and powerless over the presence of migration in North Halmahera, from various regions as victims of previous conflicts and violence. The impact of this violent incident is directly proportional to the instability of the social control castle embodied in the cultural values of "*Hibua Lamo*" as the social glue and kinship of "*orang sekaum*". Therefore, horizontal riots soon take place with the same reason and language, each maintaining self-esteem on the basis of beliefs and religions it embraces.

Keywords: Social Change, Conflict, Orang Sekaum, Peace Zone.

INTRODUCTION

"*Orang sekaum*" (ethnic Tobelo) is a social group living and interacting within the same social system that decide a certain position based on the similarity of lineage, custom and language, under the auspices of the traditional values of "*Hibua Lamo*" as the legacy of ancestor, since it was in Lake Lina Outback Halmahera. *Hibua Lamo* (large house) is a traditional body of *orang sekaum* or ethnic Tobelo who function as a gathering place for the people, to "*berhigaro*" (deliberation), and serves as a social glue. *Hibua Lamo* has become a philosophy of life for ethnic Tobelo, although this ethnicity is due to its development, they have spread in various regions of North Maluku, but the cultural values of *Hibua Lamo* remain the basis of kinship for ethnic Tobelo. Symbols used such as communication tools are the language "O Tobeloho" (the language of the Tobelo people) and "*Hibua Lamo*" (big house), as a symbol of social glue. At

certain times, if there is a customary or other social event that arises in social life, then *Hibua Lamo* as a gathering place and "*berhigaro*" (deliberation), to solve social problems, followed by ethnic Tobelo from various regions. Tobelo in addition to the Central Government of North Halmahera Regency, is also an ethnic area of Tobelo ethnic, which is a zone of peace.

A very strong kinship system has been inherited by Tobelo ethnic ancestors, based on customary values "O 'Adati de O' Galiti" (Adat and Rules / values and norms), as a foundation for building and maintaining the attitude of "O Dora - O 'Hayangi" (affection). Since they were still in Telaga Lina Outback Halmahera, Tobelo's ethnic ancestors were not familiar with the religion of the sky. After they migrated (from Telaga Lina to the coast) of the North Halmahera peninsula, then they recognize the divine religion introduced by missionaries (Christians) and mubaligh (Islam). Over the introduction, they then divided and embraced the religion that they believed (Islam and Christian), voluntarily and sought after by their parents or family. Although they have different religions, the dynamics of community life remain harmonious under the auspices of the cultural values of *Hibua Lamo*, as the basis of social harmony for the "*orang sekaum*" or by local people known as "ethnic Tobelo" and or "*Hibua Lamo*" community.

The ethnic mention of Tobelo and the *Hibua Lamo* community, to local communities is essentially the same. When meeting with local people, both at the same time with different people, and or at different times with same people, there is often a term used by ethnic Tobelo and or the *Hibua Lamo* community. According to Papilaya (2011), "*Hibua Lamo* community" and "ethnic Tobelo", can be called one class or, "*orang sekaum*". For local people, especially the laity, the term "ethnic Tobelo and the Hibau Lamo community, has the same meaning. The difference is the *Hibua Lamo* community known as the ethnic Tobelo who live and settle in the Tobelo Region and surrounding areas (customary area) under the auspices of customary institutions (*Hibua Lamo*). While the ethnic Tobelo known as one of the largest ethnic, which in addition to being in the Tobelo Region also has spread, live and settle in various areas in North Maluku Province. Tobelo ethnic that has spread beyond Tobelo, is not known as the "*Hibua Lamo* community", but is more commonly known as the ethnic Tobelo. In this article, researchers focus on the ethnic Tobelo in the Tobelo Region (customary area), known as the *Hibua Lamo* community, using the term "*Orang Sekaum*" as a representation of the ethnic term Tobelo and the *Hibua Lamo* community. Indeed, these *orang sekaum* have a strong kinship system as a legacy of civilization from the ancestors.

Human civilization in its development always follow the dynamics of social change, where each tribe undergoes constantly changing changes in the creation of a new order in a society. Change is a process of transformation that occurs in the structure of society, both in the mindset, and the pattern of behavior that lasts from time to time (Marcionis, 1987). Every society contributes to the conflict and each conflict will produce a change (Dahrendorf, 1958, 1559). Cultural growth is not always as fast, parts grow or change rapidly, while other parts grow and / or change slowly (Greenfield et al., 2003). if the occurrence of a change in a society that took place deliberately, then the conflict was always accompanying the process of change.

"*Orang Sekaum*" who had embraced divine religion, they were in a zone of peace, meaning they were in a customary area, so that in social life, acknowledging each other's position, caring and respecting each other. Respect is the need of every involved party, while the insistence on a common position is the factor that creates justice (Leasa & Samallo, 2014; Leasa & Batlolona, 2017; Leasa et al., 2017). The culture of "*orang sekaum*" respects each other, so that they always live in harmony and peace, but in its development it turns out to be dissolving in dispute between brothers of different religion (Islam vs Christian). Why should they conflict? Whereas they are brothers of the same ancestors.

DISCUSSION FOCUS

"*Orang Sekaum*" (ethnic Tobelo) residing in the *Hibua Lamo* customary area, in Tobelo Halmahera Utara, are in the social life marked by the treatment of customs. Under the foundations of *Hibua Lamo's* customary values, they always lived in harmony and peace. In 1999, "*Orang Sekaum*" was involved in open conflict (mutual killing) between brothers that was triggered by different religions (Islam vs Christian). Why should they conflict? whereas they were brothers, from the same ancestor in Lake Lina in the Halmahera hinterland. The focus of the discussion in this article, moving from the process of social change and the background of conflicts between brothers in the "*orang sekaum*" in the customary area, as a zone of peace in North Tobelo Halmahera.

CONFLICT IN PEACE ZONE IN SOCIAL CHANGE PERSPECTIVE

Social Changes In "*Orang Sekaum*"

The demands of development era has direct influence on social change in "*Orang Sekaum*" (ethnic Tobelo). Starting from previous ancestral life in Lake Lina in the Halmahera hinterland, they took their life naturally (gardening, hunting for wild animals, dressing, building houses, and other traditional lifestyles and social life). Papilaya (2011) says that "people inhabited the lake Lina hereditary, referred to as "*Orang Sekaum*" about three hundred years ago.

The "*Orang Sekaum*", then traveled and spread to the expanses of the earth in North Halmahera, fueled by a desire to reestablish the sovereignty of the ancestral kingdom, the Moro Kingdom, and the maritime heroic spirit (*Changa*), with the interaction of the coastal world had abandoned their ancestors before. After being on the coast, then forming a group of "*Orang Sekaum*" in several stretches in the North Halmahera region, then they form the village or "*Hoana*". The people are divided into ten *Hoana*, namely: 1) *Hoana Modole*, 2) *Hoana Pagu*, 3) *Hoana Boeng*, 4) *Hoana Towiliko*, 5) *Hoana Morodina or Towara*, 6) *Hoana Morodai or Toweka*, 7) *Hoana Lina*, 8) *Hoana Gura* and 9) *Hoana Mumulati* and 10). *Hoana Huboto* (Papilaya, 2011). The ten *Hoana*, scattered in the North Halmahera region.

In the 17th century, 150 or 200 Tobelo people had settled in some Gulfs, now known as the settlements of the Tobelo people (Amal, 2013), known as "O 'Tobelo hoka" (members of Tobelo society). The tribe is often nomadic or nomadic, because it is not only settled in the Tobelo region. However, it is scattered and settled also in some areas, Kao, Morotai and Bacan. They also spread throughout South Halmahera and Seram. In its development, "*Orang Sekaum*" have spread throughout the region, but they continue to maintain their holistic kinship. The customary values of *Hibua Lamo* remain a symbol of social glue. The process of "*Orang Sekaum*" dispersion in these areas is accompanied by the formation of new communities and villages that have consequences of intermingling with other groups of different cultures, and proceeds in a modern way.

There is nothing in modern society that in its life does not experience the process of interacting with others who have different cultures and leads to change. Both changes influenced by internal and external factors that can affect the existence of cultural values it has, and conflict is one of the ignorant dynamics of change. In the perspective of sociology, conflict and change always coincide with the dynamics in social life. In the era of globalization today, no society does not experience social change. The concept of change related to time and social change refers to a process within the social system, where there are differences that can be measured or observed over a period of time (Kanto, 2011).

Change is the process of transformation that occurs within the structure of society and within the mindset and patterns of behavior that take place from time to time (Macionis, (1987).

Conflict can change and directly affect the relationship of a society and can also lead to change in civilization in societies concerned. The social change is not an intuitive fact, in which a phenomenon or a change that only some people agree, as a change nor does it mean something similar to intuitive facts. However, some people consider something that happens as a change, and certain groups consider it not as a change (Lauer & Lauer, 1991).

Every society contributes to the conflict, and each conflict will result in a change (Dahrendorf, 1959; Burrows & Kinney, 2016). Each community group has a different social structure, according to social conditions and the growth of the culture in which the social environment of the community resides. The functionalists said that every element of society plays a role in maintaining stability. While, theoretical conflicts see various elements of society contribute to disintegration and change. If a negative change comes and cannot be managed wisely, it will also influence the customary and religious order in a particular society that encourages fragile social control.

Human bodies have various parts that are interconnected with each other. Therefore, various institutions are interconnected and dependent on each other. This concept of a system to describe the harmonious coordination between the institutions. Every human body has a clear and distinctive function, so too does every institutional form in society. Each institution carries out specific tasks for stability and well-being. "*Orang sekaum*" has a social control institution (*Hibua Lamo*), as an institution that serves as a social glue. The existence of *Hibua Lamo* since ethnic Tobelo was still not a religion of the sky until they embraced Islam and Christianity. Issues that occur in society, can be answered by looking for what factors integrate a society (Van den Berghe (1967) Culture of mutual respect, uphold, love, and always give respect to fellow human beings, a reflection of the norms, values and morals embodied in the philosophy of *Hibua Lamo*, as a means of social integration.

Basically, the community is integrated on the basis of the agreement of its members on certain social values, and is a general agreement, which has the power to overcome differences of interest among members of society. Thus, the members of society have a balance in their positions. The paradigm of conflict theory sees society as an arena where the inequalities exist within and potentially lead to conflict and change (Acemoglu, 2003; Mikkelsen & Clegg, 2017). The emergence of conflicts can give birth to a change and / or change can also give birth to a conflict in the life of society. The consequences of development can change the civilization of a people against the pattern of community life. "*Orang sekaum*" have also a development that changes civilization that leads to religious conflict between brothers as the consequences.

INTERCULTURAL CONFLICTS IN ORANG SEKAUM

"*Orang sekaum*" (ethnic Tobelo), known as the "calical" society that inherits a culture of mutual recognition and mutual respect, based on the philosophy of cultural values of *Hibua Lamo*, as the foundation of kinship, to preserve social stability. On the other hand, in its development, the society also dissolved in religion dispute between brothers (Islam vs Christian). People survive in many ways, that the world as a stable and ongoing entity, is struck with endurance, family, religion and other well-organized social institutions. Any society as a wide network of connected parts, where each part helps to maintain the system as a whole (Mele et al., 2010).

Departing from the philosophy of *Hibua Lamo*, then *orang sekaum* (ethnic Tobelo), in fact they always live in a peaceful atmosphere and do not have to kill each other en masse, as happened in 1999-2001. The social life order of the *Orang Sekaum* societies, that is, the culture behaves fairly toward all people. For *Orang Sekaum*, All men are created in the same degree, except the behavior of each person. Conflict is a social phenomenon that is universal and inherent in the

life of society, both in social interaction between individuals and between individuals with groups. It is therefore impossible for a "calical" society to avoid conflict in the dynamics of social life. Conflict must be managed, controlled and resolved, together wisely and peacefully, in order not to develop into violence, anarchy or destructive, which leads to disintegration or destruction of the joints of social relations in people's lives (Coser & Rosenberg, 1968). The very nature of social reality is conflict, therefore conflict is a social reality that can be found everywhere (Raho, 2014).

The conflict that happened openly between brother in "*orang sekaum*" in North Halmahera, is a series of conflicts in various regions of North Maluku Province before, such as conflicts between adherents of religion (Islam vs Christian) in Tidore, conflicts between groups of society, i.e. white groups (in combination with various ethnic groups in Southern Ternate) vs. yellow groups (in combination with the Christians and Muslims of indigenous councils of the Ternate Sultanate, in northern Ternate and its surrounding) in Ternate, conflicts between faiths (Islam vs Christian) in West Halmahera, ethnic conflict Kao with Makian ethnicity in Malifut, North Halmahera. The conflicts took place at the same time, as a result of the horizontal conflict in Ambon in 1999 (Muhammad Nur, 2013b).

The background of the conflict and violence of various regions above varied, according to the sociological conditions of the local community. In Tobelo, for example, religion conflict between brothers (Islam vs. Christian) openly (killing each other), whereas they were brothers as Tobelo ethnic from the same ancestors. Basically the Tobelo conflict was triggered by the initial conflict between Muslims and Christians in Tobelo (Duncan, 2008, 2009a, 2013, 2016). The impact of the Tobelo conflict, not only material losses, casualties, but also paralyzing the social institutions that feared community groups (Tindage, 2006). In fact all religious teachings, especially Islam and Christianity teach their people to believe that God is worshiped holy. All religions teach their people to do things that are in accordance with God's will, compassion and forgiving life One of the roles and functions of religion to reconcile from the conflict One of the important functions of religion is to reconcile the contradictions of life (Marrill, 1987).

"*Orang Sekaum*" are brothers who has different religion (Moslems and Christians) of the same ancestors. In social life, they have a very strong kinship system, under the auspices of the *Hibua Lamo* culture values, why should they conflict? This is the involvement of religion in the traces of violence in Indonesia based on the supremacy of religious understanding and conscience, as well as negative fanaticism (Hamim, 2007). Conflict refers to a situation in which a group of people with identities are clearly involved in conscious contradiction with one or more of the other groups, because the groups teach and strive to achieve conflicting goals (Coser, 1956). In social life, conflict always occurs, often using religious issues because it is seen as a sexy issue to wage a conflict (Surwandono & Ahmadi, 2011).

The process of development and change in "*Orang Sekaum*" boils down to the dynamics of community life, from previously in the zone of peace, changed instantly into conflict between brothers. The state of "*Orang Sekaum*" (ethnic Tobelo) since its ancestors remained in Telaga Lina until after being on the North Hamahera coast (before 1999), their kinship system remained well preserved. The atmosphere of social life is always reflected in the attitude of "*O 'dora O' hayangi*" (affection). Social dynamics are always built in an atmosphere of affection, mutual respect, mutual acceptance, mutual recognition and mutual care, and mutual respect, turning into an attitude of sentiment towards fellow people of different religions.

Kinship values that are always embodied in social life, such as mutual cooperation work or the term known in "*orang sekaum*" is called "*bahirono*". When one party from a community member is doing a job, whether a private job, such as a residence, or a job for the public interest, such as building a house of worship (mosque and church), the system of "*bahirono*" (mutual cooperation), becomes a prima donna in life socially. The kinship system was destroyed instantaneously by the conflict of anti-liberalism in the peace zone. The circumstances of the "*Orang Sekaum*" changed instantaneously from harmonious life, inherited by the ancestors with the system "*O 'dora O 'hayangi*" (affection) and "*O'tohora-moi*" (as blood and descendants). The situation turned into a state of "*Galosiri*" (sorrow), which is a state of society in conflict (1999-2001). In this period the open religion conflict between brothers seemed to run in a relay.

The series of conflicts succeeded in changing the kinship climate of "*O'tohora-moi*" (as blood and descendants), changing the map into differences between adherents of religion (Islam vs Christian). The social life of society in the "*sassum*" in this era is no longer under control. The kinship system embodied in the philosophy of *Hibua Lamo*, becomes fragile. In this era, the community kinship climate has been provoked, each taking choice and attitude according to the aqidah and beliefs adopted. "*Orang Sekaum*" was soon mapped into two poles in a vulgar way (Islam and Christian). The fragility of *Hibua Lamo's* cultural values, as the social glue for "*Orang Sekaum*" has a direct effect on the volatility of social control over the wave of conflict coming from outside. Because of this event, the peace map of "*orang sekaum*" in the customary area was destroyed instantly. Conflict can increase social adjustment, the conflict begins with the demands of a reward ratio, a social structure that can be either closed or in an open form (Coser & Rosenberg, 1969).

Types of problems concerning the influence of conflicts or a conflict are functional to the social system. Conflict is the most important element in human life, where conflict has a positive function (Coser & Rosenberg, 1969). Conflict becomes a dynamics in the entity's relationship always with social relations (Dahredorf, 1959), conflict is part of the process for the fulfillment of basic human needs (Doucey, 2011). According to Marx, social conflict is the opposition between segments of society to compete for valuable assets. Various kinds of social conflicts according to Marx, conflict between individuals, conflicts between groups, conflicts between nations (Raho, 2014). The nature of the theory applies universally but can not be generalized, depending on sociological conditions, country, region and or local community.

Violent conflict in pastoral areas is caused by many socio-cultural, economic and political factors that reinforce one another, by limiting the availability and reduction of access to natural resources (Opiyo et al., 2012). Everywhere people compete to get the natural resources they need. Competition for use and access to natural resources leads to conflict. Conflict also arises from differences in cultural values, social norms and sanctions related to access to natural resources (Uprety, 2006). Residents in northern Ghana identified three major catalysts of armed conflict: mutual disrespect between ethnic groups, land controversies, and endemic violence cultures (Yelyang, 2016). Different types of conflicts arise according to the social variants that exist in the region. The social, political, economic, faith (religious) and / or other injustice issues cause the conflict.

"*Orang Sekaum*" view at first that religious differences of beliefs are the right of every individual, because they think that all religions have the same purpose, believe in the existence of God and there is the doctrine of compassion toward fellow human beings in it. Many emerging pagan thought of various people or groups, against the teachings of other religions, but they do not understand the meaning contained in these verses have an meaning that can

only be understood implicitly by the religious scribes concerned. Some assume that the teachings of Islam are always voicing war, and verses are often associated with the issue of war, as in Surat At Taubah verse 5, " And when the sacred months have passed, then kill the polytheists wherever you find them and capture them and besiege them and sit in wait for them at every place of ambush. But if they should repent, establish prayer, and give zakah, let them [go] on their way. Indeed, Allah is Forgiving and Merciful".

Explicitly, the verse mentions the word "kill" because it is also the perception of certain people in certain contexts, made the basis for fighting against others if considered a stumbling block in religious life. If the verse is only read at a glance, then misperception will often occur. Indeed, in the verse is coupled with the Hudaibiyah agreement between the Prophet Muhammad and the polytheists in Makkah. Asbab command on the verse to kill when in fact addressed to the polytheists who clearly violate the agreement. There is another verse that mentions wars, as in Albaqarah verse 190-191, that " Fight in the way of Allah those who fight you but do not transgress. Indeed, Allah does not like transgressor." Furthermore, in verse 191, in Albaqarah's Letter mentions, "And kill them wherever you overtake them and expel them from wherever they have expelled you, and fitnah is worse than killing. And do not fight them at al-Masjid al-Haram until they fight you there. But if they fight you, then kill them. Such is the recompense of the disbelievers."

The cry of war, not only is in Qur'an, but there is also in the beginning of other religious teachings. As in the Bible, for example, there is also war cry, as in one of the verses which says, "My arrows will be smeared with their blood, all against Me I kill with my sword, I will not let anyone against me, the prisoner and the wounded must die "(Deuteronomy 32: 42). In another passage in the Gospels, it also says that "When the Lord your God brought you into the land to which you came to possess it, and he drove many nations before you, the Hittites, the Girgashites, the Amorites, the Canaanites, Ferries, Hivites, and Jebusites. Seven nations more numerous and stronger than you, and the LORD your God have given them over to you to strike them down, and you shall utterly crush them: make no covenant with them, pity them "(Deuteronomy 7: 1-2).

Explicitly the verses contained in the holy book (al-Qur'an and Gospel) are exploited by the faceless movers (provocateurs), who make propaganda tools for launching their mission for the sake of a moment's interest. Whereas the truth of religion teaches its people to love each other and always do good among others. In Islam for example, the Qur'an commands so many letters and verses about the teaching of compassion and doing good to others. But in its development, it is often provoked by news that suggests that Islam is not a religion that brings peace, but rather, that religion is seen to teach about violence and become a source of inspiration for terrorism. Likewise, the teachings of Christianity, so that its people always do good, be loving toward others, but often laced with messages that have provocation, which leads to sentiment among religious people.

In the Qur'an, Allah emphasizes that piety is not judged merely in the form of ritual piety, but also in the form of pious deeds and affection that must be practiced in social life. The message of the Qur'an, that "Indeed, Allah orders justice and good conduct and giving to relatives and forbids immorality and bad conduct and oppression. He admonishes you that perhaps you will be reminded." (QS 16:90). There is a group of people, whether consciously or unconsciously, they want to take the political interests of a particular religion, only to reach the goal for a moment, affecting mutual enmity. But none is granted it except those who are patient, and none is granted it except one having a great portion [of good]. "(QS 41: 34-35).

As in the teachings of the Qur'an that teach about love and affection and do good to others, so also in Christianity through the Gospels also teaches about affection and kindness towards others, but in his paraktik often covered by the news that memorable that Christianity is not a religion of peace but a religion that teaches violence and is a source of inspiration for provocateurs. There are several examples of moral messages through the Gospels include: Matthew, 19: 18, "Do not take vengeance, and hold no grudge against the people of your people, but love your neighbor as yourself. John, 4:21, "And this commandment we receive from Him: Whoever loves God, he must also love his brother". John, 5: 43 "You have heard that it was said, 'Love your neighbor and hate your enemy'. Matthew, 5:44, "But I say unto you, love your enemies and pray for those who obey you". Romans 13: 9, "For the commandments," Do not commit adultery, do not murder, do not steal, do not covet, "and whatever else you say are summed up in this saying, 'Love your neighbor as yourself.'

Religious doctrine is often made of some people as a very sexy issue in legitimizing the struggle and easily involving many people. The Fatwa said acts of violence in the name of religion are often translated by some as "legal doctrine" to be implemented (Hamim, 2007). Conflicts between believers are the most difficult to solve, for beliefs tend to be held firmly by their adherents and will sometimes be defended until death. Violent incidents with religious issues, as a justification for religious violence, have become an issue that adorns the history of violence in various regions. Religion has always been the escalator of conflict, by a faceless movement (provocateur), for the fulfillment of momentary interest.

CONCLUSION

The change of civilization in the "Orang Sekaum" in its development follows the dynamics of change that leads to social conflict. Conflict and violence in "Orang Sekaum" gave birth to two different poles in a vulgar way (Islam vs. Christian). Such events can destroy the kinship system that has been inherited by their ancestors as ethnic Tobelo. The process of social change and development in the *Hibua Lamo* community, characterized by a social climate of life in "Orang Sekaum" who previously lived in a harmonious state, turned into conflict and religious nuance violence in the peace zone.

There are two points of view which can corner the "Orang Sekaum" position in the holistic system of kinship, turning into a position of mass arena of dispute: First, the attitude of neglect of the existence of *Hibua Lamo's* customary values, such as "O 'dora de O' hayangi" (love and affection), "O'tohora-moi", "O 'adati de O' galiti" (customs and rules / values and norms), and O 'baliara "(kestiakawanan) . Second, the disbelieving attitude of thinking on the religious teachings followed, the following backfire for "Orang Sekaum" that can destroy the kinship system "O ' Tobelo hoka" in the life of society.

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Influence Of Joint Television Viewing On Romantic Satisfaction And Family Commitment: A Study Of Spouses In Delta State Secretariat Complex Asaba

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ABSTRACT

The subject of this research is the influence of joint television viewing on the romantic satisfaction and family commitment of spouses in Delta State Secretariat Complex, Asaba, Delta state. The study adopted the purposive sampling method also known as judgmental sampling. The instrument of data collection was the interview guide. One hundred and twenty six (126) spouses were purposively selected and studied in this work. All the respondents were individually subjected to an average of 30 minutes long in-depth interview conducted over a period of three (3) months. The cultivation theory and the uses and gratifications theory served as the guiding theories for the study. The major objective of the study was to assess the influence of joint television viewing of programmes on the romantic satisfaction and family commitment of spouses in the secretariat. The result showed a great correlation between joint television viewing of love related programmes and the romantic satisfaction as well as family commitment of spouses in the secretariat complex. However, this degree of correlation was absent in the case of joint television viewing of other programmes that are not love related. Therefore, the paper recommends, among others, that spouses should selectively expose themselves to love stories that teach selfless love and sacrifice rather than those with default story lines that tend to be acrimonious and divisive of couples.

INTRODUCTION

The wish of a happy married life is a popular refrain that is often chorused by friends and family members during marriage ceremonies in our societies. As our loved ones take marital vows, we commit ourselves to what we believe will be a lasting marriage filled with joy and happiness. This ideal of a long lasting companionate relationship is what we are all searching for (Johnson, 2005). This ideal was captured in Aristotle's philosophy regarding the meaning of life when he stated about 2,400 years ago that people seek happiness and a life filled with "that which is good and lasting" (Dollahite, in Johnson, 2005). Arugu (2014) opines that ordinarily, an ideal marriage will remain united, undivided and unbroken. Unfortunately, present day trends in marriages in our societies seem to indicate that these ideals are fast becoming utopian. As Johnson (2005) described it, "we seem to live in an era where the commitment to our marital relationships is slowly diminishing. Divorce, once a difficult ruling to obtain, can now be justified by simply citing 'irreconcilable differences,' and where divorce cases used to be in the minority, now many married individuals seem to have experienced at least one divorce".

Obi, in Arugu (2014) defines marriage as a union between a man and a woman that lasts the duration of the man's life and the woman's life. Mbiti (2007) avers that it is a religious and ontological duty for everyone to get married. Despite this significance, our societies are now faced with situations where marriages fail and couples cannot tolerate living together (Arugu, 2014), an experience that is simply known as divorce. According to Grath, in Arugu (ibid) divorce is a legal or customary decree that a marriage is dissolved. In other words, divorce is a permanent separation of married people as a result of unexpected marriage outcome. Mbiti (2007) calls divorce a delicate accident in marital relationship. Hoffman and Duncan, in Segrin and Nabi (2002) report that the failure of marriages in America continues to be a pervasive problem. VanDanBergh, in Johnson (2005) laments the high divorce rates and the collapse of traditional marriage life in America. Cherlin and Furstenberg (2000) found that over 11% American children were living with one biological parent and one step parent in 1992. They estimated that a fourth (ie 25%) of American children will live with a step parent before reaching the age of sixteen.

Back home in Nigeria and Africa, the sordid picture of broken marriages is not different from that of America. In the traditional African society of old, marriage divorce was seldom permitted and the rate of divorce was generally low. But today, marriage divorce is a growing social ill in our societies (Arugu, 2014). Given the soaring figures of divorce rates in our societies, scholars are beginning to pay more attention to marital satisfaction and the factors that affect it. Adegoke (2010) blames the high rate of divorce in Nigeria on urbanisation and industrialization. Other factors responsible for divorce are said to be childlessness (Mbiti, 2007); alcoholism (Adegoke, 2010); immaturity (Komblum, 2001; Reiners 2003; Rhyme, 2010; Jones, 2000; white & Booth, 2001); Religious affiliation (Jones, 2000; Tilson and Larson, 2000) and others. Segrin and Nabi (2002) believe that one explanation for the high divorce rates in our society is the idealistic expectation with which many people enter into marriage. The media have also been cited as the source of or major contributor to these expectations. Signorielli, in Segrin and Nabi (2002) argued more specifically that television may be the single most common and pervasive source of conceptions and action related to marriage and intimate personal relationships for large segments of the population. Ward, in Segrin & Nabi (2002) corroborates this position by saying that the role of the mass media, specifically television, has received increasing attention regarding its portrayal of love and romance, presenting numerous verbal and visual examples of dating, intimacy, sex and marriage. To Johnson (2005) the mass media seems obsessed with love and marriage through media reports, talk shows and reality television just as people seek ways to be happy in marriage. Incidentally, a number of leading marriage and relationship education programmes encourage couples to value and understand the benefits of spending time together as it is an important condition for a flourishing relationship (Fein, 2009). Obviously, joint television viewing by spouses offers an opportunity for such a condition stipulated above. He goes further to affirm that the time spent together is necessary for communicating, maintaining intimacy, providing support and sharing activities that deepen relationship satisfaction and commitment. Hence, this study aims at examining the influence of joint television viewing on the attainment of much desired family commitment and romantic satisfaction in marriages.

Statement of Problem

The evidence of research accounts by scholars points to a disturbing gap between the ideals and expectations of marriages and the disappointing outcome of marriage divorces experienced by couples in recent times (Johnson, 2005; Arugu, 2014; Mbiti, 2007). While VanDanBerghe, in Johnson (2005) laments the high divorce rates and the collapse of traditional marriage life in America; Arugu (2014) regrets the fact that whereas marriage divorce was seldom permitted and generally low in African societies of old, it has now become

a growing social ill. Adegoke (2010) blames the high rate of divorce in Nigeria on urbanization and industrialization. Among many other reasons advanced for the failure of marriages by scholars is the idealistic expectations with which people enter into marriage (Segrin and Nabi, 2002). Studies have blamed the media, specifically the television, for inducing the unrealistic portrayals that have become inimical to the success of marriages, Signorelli, in Segrin & Nabi, 2002; Johnson, 2005). On the other hand, a number of leading marriage and relationship education programmes encourage couples to value and understand the benefits of spending time together (Fein, 2009), Such as joint television viewing, as an important condition for a flourishing relationship. This research aims at establishing the veracity or otherwise of the claims that such love portrayals on television create idealistic expectations that eventually affect marriages negatively. This is especially so because of the far reaching implications of the subject on the wellbeing or otherwise of marriages and the society at large. To Harden (2014), the effects of divorce on society are drastic because, as he observed, the greatest cause of juvenile crime is a broken home According to Arugu (2014), the family is the bedrock of the community. Families are of paramount importance to the Nigerian society because they are considered to be the basic unit of society. He submits that, the future of Nigeria as a country depends so much on successful marriages and parenting.

Therefore, the findings of this research will help validate or debunk the claims by several scholars (Segrin & Nabi,2002;Hetsroni, 2012; Johnson, 2005) that unrealistic, idealistic and romanticized portrayals of marriage by television affect family commitment and romantic satisfaction in marriages. If this is indeed true, then the recommendations of this study will help in obviating such consequences in the interest of the Nigerian society. This is one of the problems of this research. Besides, the researcher also discovered that there is a dearth of local studies on the subject. Hence, the other problem of this research is the advancement of valid findings that will help fill the existing gap in knowledge especially in relation to the role of joint television viewing in the determination of romantic satisfaction and family commitment in marriages.

Objectives of the study

The specific objectives of this study are:

1. To ascertain the nature of the spouse's joint television viewing activity.
2. To find out the types of programmes they watch together with their spouses.
3. To assess the influence of joint television viewing on the romantic satisfaction of the spouses.
4. To assess the influence of joint television viewing on the family commitment of the spouses.
5. To establish the relationship between joint television viewing of love theme programmes and the romantic satisfaction of the spouses.
6. To establish the relationship between joint television viewing of love theme programmes and the family commitment of the spouses.

Research Questions

1. What is the nature of the spouses' joint television viewing activity?
2. What are the types of programmes the spouses watch together with their spouses?
3. Does joint television viewing influence the romantic satisfaction of the spouses?
4. Does joint television viewing influence the family commitment of the spouses?
5. Is there a relationship between joint television viewing of love theme programmes and the romantic satisfaction of the spouses?
6. Is there a relationship between joint television viewing of love theme programmes and the family commitment of the spouses?

THEORETICAL FRAMEWORK

The cultivation theory and the uses and gratifications theory will form the basis for this study.

Uses and Gratifications Theory

According to Nwodu (2006) uses and gratifications theory presupposes that media audiences are active audience members who deliberately expose themselves to a given content to gratify their needs. Nwabueze (2014) affirms that the basic tenets of this theory are that people expose themselves to media contents based on the needs and gratifications they derive from such contents. To Agbanu (2013), the theory is rooted on the assumption that reception of the contents of a mass mediated message takes place in anticipation of some rewards.

Herzog, Lazardfeld's colleague, is often credited as the originator of the uses and gratifications theory. The article, Motivation and Gratifications of Daily Serial Listeners which was written in 1944 became the first published research work to profoundly view the concept of media gratifications (Baran & Davis, 2009). The uses and gratifications theory, also known as needs theory, is preoccupied with the why answer to media use. As Okunna (1999) put it, it is the functional use of the media that the theory is concerned about. The theory is worried about what people do with the media. It assumes that members of the audience are not passive but rather, are actively involved in interpreting and integrating the media into their lives. The approach suggests that people use the media to fulfill specific gratifications. Simply put, one of the basic assumptions of the uses and gratifications theory is that audience members have certain needs that are satisfied using both non-media and media sources... (Dominick, 2009). Therein lies the relevance of this theory to the study.

Katz et al., (1974) cited in Baran & Davis (2006) listed five elements or basic assumptions of the uses and gratifications theory as:

- The audience is conceived as active with goal oriented mass media use.
- Much initiative in linking gratification and media choice lies with the audience members.
- The media compete with other sources for need satisfaction.
- People have enough awareness of their own media use, interest and motives to be able to give researchers an accurate picture of that use.
- Value judgment of the content should be suspended.

Furthermore, the researchers grouped goals for media use into five uses namely:

- Be informed or educated
- Identify with characters of the situation in the media environment.
- Simple entertainment
- Enhance social interaction
- Escape from the stress of daily life.

However, recent developments in media studies have updated Uses and Gratifications Theory (UGT) to include Gratifications Sought (GS) versus Gratifications Obtained (GO). If GO is greater than GS then there will be more audience satisfaction. Incidentally, audiences' GS are not always the reality of their GO (LaRose et al., 2001). This discrepancy between GS and GO is important in the uses and gratifications research.

The Cultivation Theory

Cultivation theory is one of the long term media effect theories developed by George Gerbner in 1973. The central message of the theory was that viewing television gradually leads to the adoption of beliefs about the nature of the social world which conform to the stereotyped,

distorted and very selective view of reality as portrayed in a systematic way in television fiction and news (McQuail, 2005). Gerbner and his colleagues went further to propose that, compared to light television viewers, heavy television viewers are more likely to perceive the world in ways that more closely mirror reality as presented on television than more objective measures of social reality, regardless of the specific programmes or genres viewed (Gerbner & Gross, in Segrin & Nabi, 2002).

In the context of marital expectations, cultivation theory suggests that in portraying idealized images of marriage, the media may be cultivating unrealistic beliefs about what marriage should be (Segrin & Nabi, 2002). In the view of Morgan and Shanahan (2010), heavy television viewing may lead the viewers to accept estimations and views that are represented on the screen with unrealistic frequency compared to their real occurrence. The cumulative effect of this, according to Gerbner et al (2002) is the internalization of norms, beliefs and evaluations of social reality that are routinely depicted on television. Again, Morgan and Shanahan (2010) assert that cultivation can be interpreted as having occurred when a significant relationship exists between the amount of time devoted habitually to television viewing and the adoption of views and assessments that are often presented. Given this background, it remains to be seen whether the findings of this study will prove the case of the cultivation theorists.

Operationalising Key Concepts.

Joint Television Viewing: This is the coming together of married men and women that work in Delta State Secretariat to watch common programmes on television with their spouses at the same time, space and location.

Family: A married man or woman working in the Delta state secretariat complex and his or her spouse.

General Programmes: Other programmes on television that are not love related.

Love theme programmes: These are programmes on television that feature stories with love as their central theme.

Romantic Satisfaction: A feeling of happiness from the physical attention, care and love of a spouse usually expressed in kind words, self-disclosure, kissing, cuddling, caressing, love-making etc.

Family commitment: This is the dogged determination to stay all the way with one's spouse in a marital relationship.

Spouse: A husband or a wife working in the Delta State secretariat complex.

LITERATURE REVIEW

Family Commitment and Romantic Satisfaction: Key Elements of Marital Satisfaction

In recent years, scholars have paid more attention to marital satisfaction. The rationale for studying marital satisfaction stems from its centrality in individual and family wellbeing, from the benefits that occur in society when strong marriages are formed and maintained and from the need to develop interventions for marital distress and divorce as they have become more prevalent (Castro-Martin and Bumpass; Stack and Eshleman) in (Johnson, 2005). This position is shared by Guerrero, Anderson and Afifi (2011) in their affirmation that forming personal romantic relationships is a central, innate and biological component of human behaviour. Two

of the key elements that are necessary for the attainment of marital relationship satisfaction are family commitment and romantic satisfaction.

According to Rusbult and Buunk, cited in Miller and Tedder (2014), relationship satisfaction is defined as an interpersonal evaluation of the positivity feelings for one's partner and attraction to the relationship commitment and romantic satisfaction. To Sternberg and Hojjat (1997) relationship satisfaction is the overall subjective evaluation of the romantic relationship. Kelly and Thibaut, cited in Reizer and Hetsroni (2014) aver that romantic satisfaction is a result of the fulfillment of positive expectations, assuming that people are satisfied if they evaluate the relationship as meeting or exceeding a set of internal standards of a "good" relationship and do not perceive any other relationship as meeting those standards better. Evidence from researches indicate that those who see their partners as closely matching their ideal standards report higher quality relationships (Simpson, Fletcher and Campbell, 2001). On the other hand, Rusbult and Buunk, in Reizer and Hetsroni (2014) define relationship commitment as the intention and desire to maintain the relationship in the long term. Le & Agnew (2003) enthuses that commitment predicts staying together and plays a key role in the success or failure of dating and marital relationship. Much more than that, commitment contributes to maintaining the relationship and its positive functioning by promoting positive behaviours (Arriaga & Agnew, 2001; Rhoades, Stanley & Markman, 2010). In the view of this researcher, family commitment can be defined as the deliberate injection of positive energy into a marital relationship with a spouse in order to ensure its sustainability.

Joint Television Viewing and Marital Satisfaction

There have been research findings establishing a relationship between heavy television viewing and overly optimistic romantic expectations (Segrin & Nabi, 2002; Hetsronic, 2012) as well as idealistic views of marriage and courtship (Holmes, 2007; Holmes and Johnson, 2011). In the words of Huston, Niehuis and Smith (2001) individuals who hold unrealistic romantic beliefs tend to encounter disillusionment and disappointment in later phases of their relationships when they realize that sustaining these romantic ideals is not feasible. A study from Albion College on 390 married couples found that the more an individual believed in the television portrayals of romance, the less likely they were to be committed to their relationship (Osborn, 2012). The study also found that the more an individual believed in the television portrayals of romance, the more their relationship costs were, that is, loss of personal freedom, loss of time or painful consciousness of their partners unattractive qualities. In other words, heavy television watchers, joint or individual, stand the risk of jeopardizing the status of their romantic relationships.

In another study, taken from the perspective of maintenance behavior, it was observed that maintenance behaviours (i.e. positivity, understanding, self disclosure, assurances, relationship talks etc) play an important role in sustaining relational states, especially within committed romantic relationship (Andregg, Dale and Fox, 2014). Also researches have shown that comparisons with ideal media portrayals of relationships are likely to lead to a negative evaluation of one's own relationship, and as a consequence, lower satisfaction with the relationship (Holmes & Johnson, 2011).

Portrayal of Idealized and Romanticised Notions of Marriage on Television

Demo and Granong, cited in Segrin and Nabi (2002) have argued that one of the most insidious factors undermining marital satisfaction and longevity is that individuals enter into marriage with unrealistic, idealistic and romanticized notions about marriage. Whereas similar researches have confirmed the fact that unrealistic beliefs are deleterious to marital satisfaction and stability (Segrin and Nabi, 2002), it is not very clear as to where their beliefs

take their roots from. In this regard, the media have been cited as one of the sources or a major contributor to the sprouting of these idealistic expectations about marriage. Illouz (1998), observed from a series of studies that subjects themselves often claimed that media representations were responsible for their views of romance. Signorielli, in Segrin and Nabi (2002) argued more specially that television may be the single most common and pervasive source of conceptions and action related to marriage and intimate personal relationships for large segments of the population. In a corroboration account, Ward, also in, Segrin & Nabi (2002) affirms that the mass media, specifically television, has received increasing attention regarding its portrayal of love and romance. Infact, researchers have found that belief in television portrayal of romance is a strong prediction of people's expectations of relationships and marriage (Osborn, 2012; Segrin & Nabi, 2002). Hetsroni (2012) is in agreement. He remarks that excessive media consumption and especially heavy television viewing are related to overly optimistic romantic expectations. Reizer and Hetsroni (2014) submit that, indeed, there is abundant evidence that heavy television viewing correlates with idealistic, unrealistic and sometimes even old fashioned beliefs concerning romance that are typical of popular programming.

Joint Television Viewing as a Home-Based Leisure Activity

Couples' marital satisfaction plays a vital role in the preservation of the family. And since families are the fundamental unit of society, it follows that stronger marriages lead to stronger families and strengthened societies (proclamation, 1995, in Johnson, 2005). One of the factors that have been found to affect marital satisfaction is couple leisure. One of the ways joint couple leisure affects marital relationship is by creating couple bonding. Orthner and Mancini, in Johnson (2005) identified three types of couple leisure activity patterns. They are; individual, parallel and joint couple leisure patterns. By definition, individual leisure refers to leisure that is done without one's spouse; parallel couple leisure refers to individual participation in the same activity at the same time, such as watching television with one's spouse with little or no communication or interaction between the couples; and joint leisure activity is a situation where couples participate together with a high level of interaction. From the foregoing definitions, it becomes clear that for a couple joint leisure activity to impact on the couple's relationship satisfaction, such activity must be highly communicative and interactive between the couples as is evident in the joint leisure activity pattern.

Still on couple leisure, studies have also suggested the core and balance model of family leisure functioning (Zabriskie, 2000) as an explanation for how family leisure involvement influences families. Where core couple leisure is depicted by joint participation in activities that are common, regular and usually home-based; balance couple leisure is depicted by joint participation in activities that are less common, less frequent and often out of the ordinary experience. However, much as studies have shown that families who regularly participate in both core and balanced family leisure activities are likely to function better and have greater family satisfaction than those who do not (Johnson, 2005), the interest of this study is limited to the examination of joint television viewing as a home-based activity within the category of core and joint couple leisure.

Joint Television Viewing, Couple Time and Marital Satisfaction

In analyzing the place of couple leisure in marital satisfaction, Johnson (2005) had observed that it is still not clear as to whether it is the kinds and amount of couple leisure involvement, or the amount of time spent together, that contributes to marital satisfaction. Hence, there have been many studies on the relationship between the amount of time couples spend together and the quality of marital relationship. Hill, in Fein (2009) found that higher amounts of shared leisure were associated with a strongly reduced probability of splitting up in analysis

of 280 married couples interviewed in the 1975-1981 Time Use Longitudinal Panel Study in America. A similar effect was found for greater amounts of time spent as a couple alone in analyses of 3,476 married couples in the national survey of families and households (Presser, 2000). Other studies have also established the fact that leisure time has increased slightly among couples (Aquiar & Hurst, 2006) and that rather than declining; the amount of time couples spend together has actually increased slightly in recent decades (Fisher et al., 2006). Also, results from studies have shown that economically disadvantaged couples spend slightly more time together than non-disadvantaged ones, and that they spend more of the time they are together in leisure activities, largely watching television (Fein, 2009). Still drawing from the data provided by the 1975-1981 panel study, Kingston and Nock, in Fein (2009) reported that, for dual earner married couples and single earner married couples, watching television accounted for the largest share of couple time (about an hour a day). In sum, Fein (2009) submits that time spent together is necessary for communicating, maintaining intimacy, providing support and sharing activities that deepen relationship satisfaction and commitment. Thus, in general, relationship quality should increase as couples spend more time together. This is the interest of this study, especially as it relates to point television viewing.

Joint Television Viewing and Sex on Television: Implications for Marital Satisfaction

According to Eidelson & Epstein, in Segrin & Nabi, (2002), two dominant themes emerge from the conceptualization of idealistic marital expectations. The dominant theme that partners who really care about each other should have complete understanding of their partners' needs and preferences; and the theme that sexual relations will be perfect. The later theme captures the issue of sex, a very important aspect of romance in marriage. It brings to the fore the portrayal of exaggerated sexual prowess on television and the expectations of unusually passionate and compatible physical intimacy which, if not met can constitute a potential threat to marriages. Unfortunately, television programmes are as preoccupied with the portrayals of idealized relationships as they are with depictions of sex. Studies have shown a link between sex portrayal and the quality of marriage relationship. For instance, sexual content seen on television has been linked to beliefs and expectations about sexual experiences in married romantic relationship (Aubrey et al. 2003). Further researches have also shown that elaborate illustrations of romantic relationships in television programmes also affect the physical, emotional and sexual expectations of married couples (Eggermont, 2004).

Marriage in Nigeria: A Contextual Analysis

This review will be done in the context of this seminar topic and against the background of the socio-cultural changes that have beset the concept of marriage in traditional Africa. Obi, cited in Arugu (2014) defines marriage as a union between a man and a woman that lasts the duration of the man's life and the woman's life, as well as a social structure that promotes an association and agreement between two families. Stark, in Amadi and Amadi (2014) identifies four primary functions of the family to include: sexual relationships, economic cooperation among members, reproduction and the educational function, which is the socialization of the children into the larger society. With the arrival of the children, the family keeps expanding and the society keeps growing. This is especially so with the typical African society where marriage is seen basically as a process of procreation. A good marriage guarantees a peaceful and joyful atmosphere in the home which is most suitable for bringing up healthy and happy children. According to Okon (2010) research has shown that children who grow up in healthy and happy environments are more likely to excel in school and in all other aspects of life including their own marital life.

Ordinarily, an ideal marriage is united, undivided and unbroken. Unfortunately, in spite of the significance of marriage, every society is faced with situations in which marriage fails and the

couples cannot tolerate living together, a situation that leads to divorce (Arugu, 2014). The prevalence of divorce in marriages in our present day societies gives cause for concern. We seem to live in an era where the commitment to our marital relationships is slowly diminishing. Divorce, once a difficult ruling to obtain can now be justified by simply citing irreconcilable differences, and where divorce cases used to be in the minority, now many married individuals seem to have experienced at least one divorce. Nigeria is not without its fair share of broken marriages. In the traditional African society of old, divorce was seldom permitted and the rate of divorce was generally low. But today, divorce is a growing social ill in our society (Arugu, 2014). Divorce, which used to be an aberration in African societies, has since become a new way of life with us. Mbiti (2007) calls divorce a delicate accident in marital relationships. Adegoke (2010) blames the high divorce rate in Nigeria on urbanization and industrialization. Other reasons such as childlessness, alcoholism, immaturity etc have been adduced by scholars as factors responsible for the growing rate of divorce in Nigeria. Curiously, none of these studies on causes of divorce in Nigeria have blamed media consumption, especially television viewing, despite the findings of research that unrealistic portrayals of romance on television correlates strongly with problems in marriages. Therefore, it is hoped that this study will assess correctly the influence of joint television viewing on family commitment, romantic satisfaction and overall marital satisfaction of couples in Nigeria.

The Delta State New Secretariat Complex, Asaba

The Delta State Civil service secretariat complex is comprised of two complexes: the old secretariat complex and the new secretariat complex. The new secretariat complex was discretionally chosen by the researcher for this study. The new secretariat complex is located on Maryam Babangida way, off Okpanam road in the heart of the state capital, Asaba. There are a total of seven different departments in the complex comprising the ministries of economic planning, education, health, finance, sports development, bureau for special duties and the office of the Accountant General of the state. The total staff population of the new secretariat is 1,902. Out of this number, a total of 1,303 are married, while 599 are still single. A closer look at the married population of the secretariat staff shows that 684 are married men, while 619 are married women, and since the study was targeted at married, co-habiting men and women who engage in joint television viewing with their spouses, a total of 126 respondents who met these criteria were purposively chosen and studied.

METHOD OF STUDY

The study adopted the purposive sampling method also known as judgmental sampling. The merit of purposive sampling stems from the fact that the researchers skill and fore-knowledge of sample characteristics to a large extent, guide researchers choice of samples (Nwodu, 2006). The method imbues in the researcher the prerogative of judgment in selecting his respondents based on certain predetermined criteria that will serve the purpose of the research. In this case, the predetermined criteria for choosing the respondents are three-fold: one, the respondents must be married couples; two, they must be co-habiting, and not correspondent, married couples and three, they must be couples that routinely engage in joint television viewing in terms of sameness of time, location and space. After a long and tortuous process of elimination of those that did not meet the specific criteria, the study was narrowed down to 126 qualified respondents comprising 69 married men and 57 married women.

Information was obtained from the respondents using face to face in depth interview sessions. The interview guide was used for these interviews. It was divided into sections A, with questions on demographic details; B, questions on spouses joint television viewing details; C, questions on joint television viewing and romantic satisfaction; and D, questions on Joint television viewing and family commitment. The Delta State New Secretariat Complex at

Maryam Babangida way, off Okpanam road in Asaba is the area of Study. Out of the 1,902 workers in the secretariat complex, 126 workers were purposively selected for this study. The choice of the new secretariat complex for the study was done in exercise of the researcher's discretion.

DATA PRESENTATION AND ANALYSIS

The responses given to the questions in the interview guide by the 126 purposively sampled respondents constitute the data for this study. The responses given at the interview sessions are, in part, graphically presented in tabular form and simple percentages for ease of comprehension; and the other part is presented by using the explanation building technique.

Table 1 - Demographic composition of respondents

S/N	ITEM	FREQUENCY	PERCENTAGE
1.	Gender		
	Male	69	54.8
	Female	57	45.2
2.	Age (in years)		
	Below 25	06	4.8
	26-35	42	33.3
	36-45	54	42.9
	46 and above	24	19
3.	Age of marriage		
	1-5yrs	42	33.3
	6-10yrs	45	35.8
	11-15yrs	21	16.7
	16-20yrs	09	7.1
	21 and above	09	7.1
4.	Educational Qualification		
	FSLC	-	-
	O/L	-	-
	NCE/ND/HND	42	33.3
	B.Sc/M.Sc/Ph.D	84	66.7

Table 1 shows a sex distribution of male respondents (54.8%) and female respondents (45.2%). It also shows that majority of the respondents (42.9%) are between the age range of 36-45 years. Also, there is indication that majority of the respondents are highly educated with most of them (66.7%) having a minimum of Bachelor's degree; and 33.3% representing those with NCE, OND and HND. It was zero percent for first school leaving and ordinary level certificates.

On age of marriage, it shows that majority of them have been married for between 6-10years (35.8%); 1-5years (33.3%), respectively. Others are 11-15years (16.7%);16-20 years (7.1%); 21 and above years of marriage (7.1%).

In-depth Interview

The researcher used the in-depth interview method to elicit more expansive responses from the respondents, especially with regards to the questions in the interview guide that have to do with joint television viewing and how it influences their romantic satisfaction and family commitment. The explanation building technique was used to further explicate the responses for better understanding.

Nature of Joint Television Viewing Activity

Majority of the respondents often engage in joint television viewing of programmes with their spouses. In this category are those who said they observe this routine on a daily basis, with the least of them exercising this routine at least five times a week. On the other hand are those who said that they are not often engage in this joint television viewing exercise. For those in this category, they are only involved in this activity between 2-3 times a week. Some others within this category said they only indulge in joint television viewing of programmes during weekends alone. Altogether, all the respondents engage in this activity but with varying degrees of frequency. On location and space of joint television viewing activity, majority of the respondents said they watch programmes together in their living rooms. The number of those who said that they watch the programmes in their bedroom was far lower in comparison to those that use their living rooms. In between are those who stated that they use both the living room and the bedroom as their moods dictate. The distribution of the programmes jointly watched by the respondents and their spouses are captured in this descending order of popularity: soaps, news, sports, religious programmes and documentaries respectively. When the respondents were asked specifically if they jointly view love related programmes, an overwhelming number of respondents answered in the affirmative while a few said they do not. On the frequency of exposure to love story programmes, most of the respondents said they do this quite often. Another good number of them said they do so, but not so often. Contrariwise, a few of the respondents maintained that they do not see love story programmes with their spouses at all.

Influence of Joint Television of general Programmes Viewing on Romantic Satisfaction and Family Commitment

Some of the questions in the interview guide sought to know how joint television of general programmes, influence the romantic satisfaction of the respondents in their marriage. Majority of the respondents believed that joint television viewing does not have any influence on their romantic satisfaction. Most of them actually dismissed such a possibility with a wave of the hand. This feeling was aptly captured by one of the respondents in these words: "the things I see on television are inconsequential to my feelings in my marriage". On the other hand, there were some respondents who expressed the opinion that their romantic satisfaction were positively and negatively influenced by joint television viewing of programmes. On the positive side, one respondent said, 'joint television viewing influenced my husband and I positively because I learnt to understand him by watching what he likes and it brought us closer together'. Another respondent complained that joint television viewing affects his romantic relationship with his wife negatively because "she does not usually have much interest in news and football. At such times, she feels ignored and becomes upset so much so that it ruins our day or night". One of the respondents put it rather bluntly thus: "watching some of these programmes like news about happenings in Nigeria kills ones romantic desires"

On the influence of joint television viewing on family commitment, an overwhelming majority of the respondents said that joint television viewing does not in any way influence their commitment to their spouses. As one respondent put it, "my marriage to my husband is beyond the influence of television. It is for better or worse"

Influence of Joint Television Viewing of Love Related Programmes on Romantic Satisfaction and Family Commitment

The study showed a strong correlation between joint television viewing of love related programmes and romantic satisfaction among the respondents. Most of them were of the opinion that joint television viewing of love related programme influenced their romantic satisfaction. Some of the programmes cited by the respondents include the Zee world series

such as *Twist of Fate*, *Silver lining*, *Young Dreams*; Telemundo series such as *Passion for Revenge*, *How to Love*, *Love Alone* and others in the *African Magic* and *Super Story* series. According to one of the respondents, “specific love programmes influence us positively and leads to increased sexual activity”. Another respondent observed that “after watching some of the programmes, body chemistry changes and leads to romance and sexual creativity with my husband”. These statements reflect the position of most respondents to the effect that joint television viewing of love programmes prompts intimacy and enhanced sexual activity with their spouses. However, there were some who did not share this opinion. To them, joint viewing of love related programmes create emotional tension, separation and distancing between them and their spouses. Infact, for some respondents, the influence of watching the portrayal of perfect love relationships on television was so adverse to their romantic relationship that the couple had to take a drastic decision to opt for religious programmes on television. The man said, “my wife and I used to be heavy watchers of love programmes like “Telemundo”. But we later realized that, rather than bond us, the strange cultural attributes of these love stories that were alien to our culture here, was threatening to tear my wife and I apart. So, to save our marriage we opted for religious programmes on TV”. Another respondent blamed the altercations that arise between couples from watching love themes on what he calls “the default lines of the stories”. He complained that the story lines in most of the so-called love themes breed distrust and suspicion among couples, thereby driving a wedge between them. He recommended classical story lines such as the one in ‘titanic’ for couples who are in search of romantic satisfaction and family commitment in their marriages. On the effect of portrayals of perfect couples on their romantic satisfaction, most of the respondents said they learn from such models to improve in their marital romance. Again, there were some dissenters on the positive influence of the portrayals of perfect couples. One of the respondent’s views captures this feeling inadequate thus: “the perfect portrayals create tension in my marriage. They make my husband feel inadequate”.

On the influence of love programmes and the portrayals of perfect couples on their family commitment, virtually all the respondents insisted that there is no correlation between these variables and their commitment to their marriages. While admitting that such portrayals actually reveal the gaps and failings in their marriages, they submit that such feelings do not translate to a lack of commitment to their family. Rather, they admit that such feelings increase their resilience, resolve and commitment to make their marriages work. Others chose to dismiss the portrayals of perfect couples with a feeling of incredulity. To them, such portrayals are works of fiction and the players are merely earning a living. Hence, it should not be allowed to affect their family commitment. Some of the respondents had the following to say about love programmes and perfect portrayals of couples; “...it encourages me to remain in my marriage with the belief that one day, the wind of happiness will bow into my marriage again”. Another said, “the perfect couples strengthen my desire to stay in my marriage and whatever is negative I discard because I know it is based on fiction”. One other respondent blurted out saying, “I don’t connect what I see on television with my marriage, I watch for fun and relaxation”.

FINDINGS

The findings from the data analysed show that:

- All the respondents engage in joint television viewing but with variegated degrees of frequency. Majority of them often engage in the routine of joint television viewing of programmes with their spouses while the others do so not as often.
- The most watched programme was soaps followed by news, sports, documentaries and religious programmes in that order.

- Most of the respondents engage in joint television viewing with their spouses in the living room.
- There is a weak correlation between joint television viewing of general programmes and the romantic satisfaction as well as family commitment of the spouses.
- The romantic satisfaction and family commitment of majority of the respondents were positively influenced by joint television viewing of love related programmes.

DISCUSSION OF FINDINGS

The findings of the study regarding the nature of joint television viewing activity shows that majority of the respondents often engage in the routine of watching television programmes together with their spouses. This finding is in conformity with the position of leading marriage and relationship education programmes that couples should spend time together in order to enjoy a flourishing relationship (Fein, 2009). It also shows that soaps were the most watched programme by the respondents. What is more, the majority of respondents engage in the joint television viewing activity in their sitting rooms. In all, the frequency of joint television viewing activity, the choice of what to watch and where to watch the programmes characterize the nature of the respondents joint television viewing behavior.

On objectives 3 and 4, the finding that there is a weak correlation between joint television viewing of general programmes and romantic satisfaction echoes the position of earlier studies on this subject. A study of 390 marriage couples from Albion College had shown that the status of a romantic relationship could be in jeopardy if the couple or an individual in the relationship are frequent television watchers (Osborn, 2012). This was the point of one of the respondents who admitted that in the course of watching news or football, he ignores his wife in a way that upsets her and ruins their day or night as the case may be.

The findings of objectives 5 and 6 indicate that the watching of love related programmes positively influenced romantic satisfaction and family commitment of the spouses. This finding is completely at variance with the position of earlier studies that idealistic portrayals of romance on television jeopardizes the status of romantic relationships (Segrin and Nabi, 2002; Hestroni, 2012; Holmes and Johnson, 2011). The findings of this study do not support this position at all. Rather, the findings are consistent with the recommendation of leading marriage and relationship education programmes that couples should spend time together in order to enjoy a flourishing relationship (Fein, 2009). And whereas, spending time together watching other programmes did not achieve it, the choice of watching love related programmes correlated positively with romantic satisfaction and family commitment of the couples as the findings of the study indicate. Finally, it is instructive that majority of the respondents watch soaps more than other programmes and were rewarded for so doing with romantic satisfaction and family commitment. This is consistent with the position of the uses and gratifications theory that media audiences are active audience members who deliberately expose themselves to given media content to gratify their needs (Nwodu, 2006).

CONCLUSION AND RECOMMENDATIONS

The wish of a happy married life defines the expectations of man and society in legitimate search for the good life. It is therefore a tragedy of human history that marriage, which used to be a guarantee for the building of a happy and healthy society, is bedeviled by the woeful tale of divorce and broken homes. Among many other factors, the media have been fingered as one of the promoters of the increasing rate of divorce cases through the portrayal of unrealistic romantic beliefs that tend to cause disillusionment and disappointment for believing couples in the late phases of their relationships (Huston, Niehuis and Smith, 2001). Whereas, the findings of this study are in agreement with earlier studies that joint viewing of general programmes

negates relationship satisfaction in marriages, this is not the case with the joint viewing of love genres. In fact, the findings of this study contradict earlier findings on this subject by showing a strong correlation between joint television viewing of love related programmes and the romantic satisfaction and family commitment of spouses. However, in order to consolidate on the gains of the positive influence of joint television viewing of love genres on spousal romantic satisfaction and family commitment, the paper recommends as follows:

- One, that spouses should be selective of the story lines of the love related programmes that they are exposed to on television. They should opt for love stories that teach true love and sacrifice in preference for those with default story lines that tend to be acrimonious and divisive of couples.
- Again, especially for individual joint viewership, couples should guard against addiction to programmes that would potentially distract them from their primary responsibility of giving attention to their spouses.
- Thirdly, spouses should be mindful of cultivating the negative messages on television that could prove inimical to their romantic satisfaction and family commitment.
- Finally, the researcher recommends further studies on the subject to determine the influence of cultural variability (Fein, 2009) on the outcomes of studies on joint television viewing of spouses with western cultural background and those of the disparate African cultural background.

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Economic Analysis Of The Effects Of Natural Tenderizer (PAPAIN) On Meat Quality Of Spent Layers

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ABSTRACT

The study was carried out to determine the tenderization effect of papain on spent layers meat. A total of 15 spent layers were randomly assigned into five treatments of 3 replicates in a completely randomized design. The spent layers breast and thigh meat were soaked in different concentration of 0.00%, 0.25%, 0.50%, 0.75% and 1.00% of papain represented as T₁, T₂, T₄ and T₅ respectively for 30 minutes. The physico-chemical and sensory properties were determined. The cooking loss, thermal loss, drip loss and pH increases with increase in inclusion level compared with the control. It was found out that in thermal loss the highest significant differences ($p < 0.05$) was T₅ (30.00) while in cooking loss T₄ (66.85) has the highest value and the highest significant ($p < 0.05$) was T₂ (28.90) and T₅ (23.30) has the lowest for crude protein content compared to control. Result of sensory evaluation indicated the improvement of the sensory qualities of the samples treated with papain especially of tenderness, juiciness, ease of fragmentation and the colour. These results were reflected on the general acceptance by the consumer of the meat. The result revealed that T₂ (5.40) was the best sample which is with 0.25% inclusion level of papain among the treated samples. Significance differences ($p < 0.05$) as far as concentration levels increases were noticed. The papain used in softening the meat attracts little or no cost, adds flavor and nutritive value to meat, which strongly influences the eating quality and acceptability by the consumers and in turn reduces the toughness of the meat and increase the rate of consuming spent layers by human being rather than using them for feeding the pet. Also, tenderization will cause reduction in price and demand for broilers during festivals. The results of the study therefore recommend the use papain at 0.25% inclusion level in tenderizing spent layer meat %. It does not have adverse effect on the physical, chemical and the organoleptic properties of the spent layer meat.

Keywords: papain, myofibrillar proteins, spent layers, meat tenderness.

INTRODUCTION

Poultry refers to all birds of economic value to man. The importance of poultry as a source of ready cash and meat for human consumption is well recognized. FORD (1990) reported that poultry meat production provide profit, generally representing 20% of total meat product consumption of which 17% was chicken. The problem of malnutrition has remained an unresolved global issue for a long time. FAO (1999) asserted that the most critical problem in the global food basket crises is protein especially animal origin. However, Isiaka *et al.*, (2006), postulated that the poultry was strategic in addressing animal protein shortage in human nutrition.

Globally, there are about 2.6 billion of spent hens that are used in the pet food industry and not much for human consumption (Navid *et al.*, 2011). Spent hens is mostly underutilized and are

used in low priced mince product at the end of laying cycle and these birds become available for use in further processed product (Nowasad *et al.*, 2000). However, meat obtained from spent layers has poor functional properties, tends to be tough, non-juicy and low in fat (Sighet *et al.*, 2011). Because of unacceptable toughness and brittle bones the use of spent chicken meat has long been a problem for the poultry industry. Ariff (2006) reported that the lack of broiler chickens supply in the market to fulfill consumers demand as well as the tremendous increase in the price of broilers chickens during festival forced many people to opt for spent layers instead of broilers. Furthermore, if meats from spent layers are processed properly they can be good source of nutrients especially protein and amino acids (Nowasad *et al.*, 2000, Fuller, 2004).

Consumers' acceptance of meat is strongly influence by the eating quality. Meat quality is defined as a combination of diverse properties of fresh and processed meat, these properties contain both sensory characteristics and technological aspect such as colour, water holding capacity, cooking losses and texture (Walsh *et al.*, 2010, Kargiotou *et al.*, 2011) of the sensory characteristics, eating quality which consists of flavor, tenderness and juiciness has been regarded as the most critical characteristics because it influence repeat purchase of consumer. Tenderness is considered to be the most important organoleptic characteristics of meat (Lawrie, 1997). The toughness associated with spent chicken meat is primarily due to increased cross linking in the connective tissue of the older animals (Archile Contreras *et al.*, 2011). Spent layers which are being used for meat purpose are going to be discarded by the quality conscious consumer due to inherent quality differences especially tenderness of spent layer meat. Therefore, the farmers are facing a problem in dispersing their old underproductive layers at a minimum price.

Tenderness is influence by the length of sarcomeres, structure integrity of the connective tissue that affects the background toughness (Chen *et al.*, 2006). Several methods have been tested to improve the tenderness of meat by the use of enzymes (Ashie *et al.*, 2002; Wada *et al.*, 2002; Naveena *et al.*, 2004; Pawa *et al.*, 2007), salt, phosphates (Pietrasik *et al.*, 2010), and calcium chloride (Gereit *et al.*, 2000). Moreover, there have been some physical method to tenderize meat such as pressure treatment (Palka 1999), ultrasound (Jayasooriya *et al.*, 2007), electrical stimulation (Claus *et al.*, 2001) and blade tenderization (Pietrasik *et al.*, 2010). Proteolytic enzymes are commonly used in meat tenderization these enzymes can be obtained from plant, bacterial and fungal sources.

There are five exogenous enzymes (papain, bromelain, ficin, *Aspergillus oryzae* protease and *Bacillus subtilis* (bacteria) protease) recognized by united state federal agencies as generally recognized as safe (GRAS) for meat tenderization. Apart from these GRAS enzymes, others have been evaluated including ginger rhizome (Sullivan and Calkins, 2010). However, proteolytic enzymes extracted from plant such as papain, bromelain and ficin have been more commonly used as meat tenderizer in the world (Naveena *et al.*, 2004) because bacteria derived enzymes mainly lead to safety concern (Chen *et al.*, 2006).

Spent layers meat toughness is primarily due to the increased cross linking in the connective tissue of the older animals which affect the consumer acceptance of the meat and the meat are being discarded by quality conscious consumer. Proteolytic enzymes extracted from plants (organic sources) as meat tenderizer are preferable to the conventional synthetic tenderizers available. From ongoing, the study aims at determining the effect of natural tenderizers on meat quality attribute of spent layers meat. Specifically the study was designed to: assess the physical properties of spent layer meat tenderized with papain, evaluate the chemical property effect of papain on meat quality of spent layers and evaluate the sensory property of spent layers meat tenderized with papain.

Muscle Structure

Skeletal muscle contains a large number of single muscle fibers. The entire skeletal muscle is wrapped by epimysium which is a thin cover of connective tissue extending over the tendon. Each muscle includes several muscles fiber bundles which are wrapped by perimysium, another thin cover of connective tissue .Muscle fiber bundles including a varying number (30 - 80) of individual muscle fibers up to a few centimeters long with a diameter of 50 microns. Each bundle is surrounded by endomysium of the other layer of connective tissue. Muscle fibers contain about 1000 myofibrils which are responsible for muscle contraction and relaxation. Myofibrils are composed of the thin filaments (actin) and thick filaments (myosin) (Toldra, 2002, Heinz and Hautzinger, 2007).

The sarcomere is the smallest contractile unit of a muscle fiber and it is approximately 2.3um long (Toldra, 2002). Sarcomeres are linked end-to-end within the muscle fiber. There are thin and thick filaments within each sarcomere. The filament are oriented an overlapping arrangement which result in dark and light bands giving appearance of striations. Myofilaments are connected to the net-like structure cell membrane known as sarcolemma. Muscle fibers are filled with intracellular sarcoplasm (cellular fluid), which is a liquid made up of approximately 80% water as well as proteins, enzymes, lipids, carbohydrates and inorganic constituents (Aberle *et al.*, 2001, Chan 2011).

Muscle Protein Composition

A mammalian skeletal is composed of approximately 75% water, 18-20% protein, 0.5-1% fat, 1% of carbohydrate and 3.5% of other soluble materials (non-protein and non-carbohydrate) (Duke 1943). These percentages may differ, especially in fat content depending on species, amount of fattening and inclusion of adipose tissue.

Muscle proteins have significant roles for the structure, function and integrity of the muscle. Proteins changes during the conversion of muscle to meat which affect the tenderness and additional changes occur during further processing through the formation of peptides and free amino acids as a result of the proteolytic enzymatic activity (Toldra and Reig 2006). A typical adult mammalian muscle is approximately composed of 19% proteins. Based on their function in a muscle and solubility in aqueous solvents, proteins are generally categorized in to three main groups; myofibrillar, sarcoplasmic and stromal proteins.

Myofibrillar Proteins

Myofibrillar proteins are salt soluble proteins making up about 45-50% of the total proteins they are extracted by salt solutions and require higher ionic strength called salt-soluble proteins. In skeletal muscle myofibrillar proteins can be classified into three main groups. (i) Contractile proteins (myosin and actin). (ii) Regulatory proteins (Tropomyosin and Troponin). (iii) Cytoskeletal Proteins (titin, nebulin, C-protein and M- protein. Myosin is the main protein of the thick filament having a rod shape. Each myosin has a tail and two globular heads. (Aberle *et al.*, 2001)

Sarcoplasmic Proteins

Sarcoplasmic proteins are water soluble proteins extracted in aqueous solution with low ionic strength (0.15 or less) (Aberle *et al.*, 2001). They contain metabolic enzymes (mitochondrial, Lysosomal, microsomal, nucleus of free in the cytosol), hemoglobin, myoglobin and cytochromes (Toldra 2002, Wang 2006). Some of these enzymes have important activity in post mortem meat and during further processing. The main sarcoplasmic protein is myoglobin which is responsible for the red meat colour, the amount of myoglobin depends on the fiber type, age of animal and animal species. For example, beef and lamb meat include more

myoglobin than pork and poultry. In general, the amount of myoglobin increases with the age of the animal (Toldra and Reig, 2006).

Stromal Proteins

Stromal proteins are water and salt insoluble proteins which include proteins of connective tissues which are very fibrous and insoluble proteins comprising about 10-15% of the total protein in the skeletal muscle (Aberle *et al.*, 2001). The main components of stromal proteins are collagen reticulin and elastin (Toldra and Reig, 2006). Stromal proteins predominantly contain collagen providing strength and support to the muscle structure (Toldra, 2002). The skeletal muscles become tougher with age because the number of crosslinks increases in the collagen fiber, this is the reason why meat tenderness decreases in older animals. (Toldra and Reig, 2006). There are two kinds of connective tissue proteins which are called as proper and supportive. The connective tissue layers, epimysium, perimysium and endomysium are known as connective tissue proper (Alvarado and Owens, 2006). Supportive connective tissue provides structural support because it contains bones and cartilages. Elastin is found in lower level generally in capillaries, tendons, nerves and ligaments (Toldra and Reig, 2006).

Muscle Fiber Types

There are many factors affecting fiber type composition such as species, muscle types (Klont *et al.*, 1998), gender (Ozawa *et al.*, 2000), age (Candek-potokar *et al.*, 1998), breed (Ryu *et al.*, 2008), hormone (Florini *et al.*, 1996), and physical activities (Jurie *et al.*, 1999). Fiber types can be differentiated depending on their appearance (red and white), physiological behavior (speed of contraction), biochemical properties (myoglobin content) and histochemical staining properties (glycolytic or oxidative) (Pearson and young 1989). In order to describe the characteristics of muscle and determine various muscle fibers, histochemical staining can be used (Morita *et al.*, 2000 and Ozawa *et al.*, 2000).

Meat Tenderness

Tenderness is one of the most discussed features in meat and the most important organoleptic characteristics of meat (Lawrie, 1997). It is a real challenge for the scientific economy and for the meat industry to achieve product with standardize and guaranteed tenderness, since these characteristics is exactly what the consumers want in meat product (Koohmararie, 1995). The meat industry has identified the problem of inconsistent meat tenderness as a top priority. This requires a detailed understanding of process that affect meat tenderness and perhaps more importantly, the utilization of such information by the meat industry (koohmararie, 1996). Tenderness has been linked to several factors such as, animal age, sex or muscle location and also influenced by the length of sarcomeres, structure integrity of the connective tissue that affect the background toughness.

METHODS OF MEAT TENDERIZATION

There are different methods of tenderizing meats such as physical or mechanical method, chemical method and enzymatic method.

Physical Method

There have been some physical methods to tenderize meat such as pressure treatment (Palka, 1999), ultrasound (Jayasooriya *et al.*, 2007), electrical stimulation (Claus *et al.*, 2001) and blade tenderization (Pietrasik *et al.*, 2010). There are two major types of physical meat tenderization method utilized by the meat industry which are; (1) needle or blade tenderization (2) cubing or maceration (Davis *et al.*, 1975). Meat tenderness is also improved mechanically during processes such as injection and tumbling (Pietrasik and Shaid 2004). However, for these processes mechanical improvement in tenderness is secondary to moisture

or flavor addition. Other forms of mechanical tenderization have not been implemented due to cost or lack of effectiveness. (Schilling *et al.*, 2003).

Chemical Method

There are many chemical ways to improve tenderness of tough meat such as the use of calcium chloride (Gereit *et al.*, 2000), vitamin D supplementation (Gereit *et al.*, 2000) and the use of phosphates salts (Pietrasik *et al.*, 2010). The use of calcium chloride has also gained prominence in reducing toughness in beef and chicken carcass, the tenderization effect of calcium chloride has been attributed to the activation of calpain (the calcium ion) dependent protease involved in ageing of meat (Koochmaraie, 1994) and also to the increase in the intracellular ionic strength including protein solubilization (Takahashi, 1992)

Enzymatic Method

In addition to the physical and chemical methods of tenderizing meat, treatment by enzymes is a popular method for meat tenderization. Proteolytic enzymes derived from plants such as papain, bromelain and ficin have been widely used as meat tenderizers in most parts of the world (Naveena *et al.*, 2004). Proteolytic plant enzymes are superior to bacteria derived enzymes mainly because of safety problems such as pathogenicity or other disadvantageous effects (Chen *et al.*, 2006).

ENZYMES USED IN MEAT TENDERIZATION

Papain

Papain is extracted from latex of *Carica papaya* fruits, papain a cysteine hydrolase, is highly stable and active under a wide range condition (Cohen *et al.*, 1986). Due to its proteolytic property, it is extensively used in food industry to tenderize meat and as an ingredient in flour and in beer manufacturing (Khanna and Panda, 2007). Papain also have an antifungal, antibacterial, and anti-inflammatory properties (Chukwuemeka and Anthoni, 2010). Vo and Huynh (2009) reported that the activity of papain is strongly affected by type of substrate, the ratio of enzyme to substrate, pH, temperature and period of hydrolyzing process. For instance, optimum pH casein was found to be 7-7.5 and 4.5-7.1 for albumin (Duc Luong Nguyen, 2004). Vo and Huynh (2009) conducted a study on protein of pangasiandon hypothalamus; using the kunitz method (1947) to determine enzyme activity. This method uses orthophthaldehyde to measure the amount yielded amino acid. It was reported that optimum pH was 6.0 and optimum temperature was 55°C for papain. The enzyme had very low activity at pH 4 and 10 and at temperature 4 and 95°C. In two other studies, Khaparde and Sigal (2001) reported that papain had optimum of 6.0 and temperature at 70°C, while Katsaros *et al.*, (2009) reported that 95% inactivation of papain was achieved at 900Mpa and 80°C after 22 min of processing. White and White (1997) gave some specific information on papain molecular weight: 23000Da, optimal pH: 6.0-7.0, isoelectric point 8.75, stable pH: 6-7.5 (White and White, 1997)

Bromelain

There are two different bromelains extracted from pineapple plant (*Ananas comosus*), stem and fruit bromelains. Fruit bromelain is not commercially available. Bromelain is composed of cysteine proteases and non- proteases component (Rowan *et al.*, 1990, Larocca *et al.*, 2010). This proteolytic enzyme is mainly used for meat tenderization (Kolle *et al.*, 2004). It is also used as a nutritional additive to assist digestive health and anti-inflammatory (Wen *et al.*, 2006), anti-edemateous (Seitzer, 1964), absorption facilitator of anti-biotic drugs (Neubaver, 1961), an anti- thrombotic (Metzig *et al.*, 1999) and an immunogenic agent (Hale *et al.*, 2002). The preferential cleavages of bromelain are lysine, alanine, tyrosine and glycine.

As with many other enzymes, bromelain activity depends on some intrinsic and extrinsic factors. Among those are, temperature and pH significantly affect bromelain activity (Corzo *et*

al., 2012) conducted a study characterizing the proteolytic activity of fruit bromelain using five different substrates; azocasein and azoalbumin (pH 3-10 at 20-70°C), casein and sodium caseinate (pH 2-10 at 20-70°C) and hemoglobin (pH 2-6.5 at 30-60°C). In this study, fruit bromelain had its optimum activity at pH 7.5 for azoalbumin and at 6.5 for azocasein, at 55°C for azoalbumin and at 50°C for azocasein.

In the other studies, Yoshioka *et al.*, (1991) found that commercial bromelain from pineapple stem was completely inactivated by heating for 30mins at 60°C, while Gupta *et al.*, (2007) indicated that bromelain lost 50% of its activity by heating for 20min at 60°C. Liang *et al.*, (1999) reported that bromelain from pineapple fruit juice concentrate lost 50% of its initial activity by heating 60min at 60°C. Juramongkan and Charoenrein (2010) studied the effect incubation on temperature on fruit bromelain activity on 40, 50, 60 and 80°C using casein as a substrate. They indicated that there was no fruit bromelain activity loss for up to 60 min at 40°C while at 50°C almost 83% of activity remained. They also reported that bromelain from pineapple juice or fruit is more stable when encountering heating than commercial bromelain obtained from pineapple stem.

Ficin

Ficin represents to the endoproteolytic enzymes from trees of the genus *Ficus*. The ficin that have been isolated from the latex of *Ficus glabrata* and *Ficus carica* are the most widely studied ficins. However, recently a less known ficin from the latex of *Ficus racemosa* has been identified with a molecular weight of 44500 optima pH between 4.5 and 6.5 and maximum activity at 60 ± 0.5 °C. These unique properties make it distinct from other known ficins and give it application in many sectors (Deveraj *et al.*, 2008).

Ginger Rhizome

Ginger rhizome is a source of plant proteolytic enzymes. The ginger protease show optimum activity at 60°C and rapid denaturation at 70°C. Its proteolytic activity on collagen was greater than it was in actomyosin (Thompson *et al.*, 1973; Naveena and Mendiratta, 2004). It has been reported that ginger extract has anti oxidant and anti microbial characteristics as well as its tenderizing properties (Kim and Lee, 1995; Mendiratta *et al.*, 2000).

Several examples of proteases (plant, bacteria and fungal) application in meat product can be found in the literature. Sullivan and Calkins (2010) studied the tenderization effect of five GRAS enzymes (papain, bromelain, ficin, *Bacillus subtilis* protease, two variations of *Aspergillus oryzae* protease which are *Aspergillus oryzae* concentrates and *Aspergillus oryzae* 400) and homogenized fresh ginger on beef muscle. All enzymes except ginger extract displayed a considerable tenderization effect but the lowest shear forces were obtained from the meat treated by papain. Bromelain degraded collagen more than the contractile proteins. Ginger shows tenderized effect but higher levels of ginger result in flavor issues.

Spent Layers

Layers can supply eggs for two to three years before been regarded as spent layers but a depression of egg prices shortens this time (Li, 2006). At the end of egg laying cycle (usually at 85 to 100 weeks) these birds become available for use in further processed. Age makes spent layers muscle to be objectionable tough and this is because of high amounts of heat stable collagen (Nowasad *et al.*, 2000). An increase in collagen cross linking in the connective tissue of older animal also contribute to its meat toughness (Swatland 1984). This toughness has precluded its use in whole meat food and has reduced its market value. (Naveena and Mendiratta, 2001). Spent layer meat poses serious problems with regard to both processing and utilization (Singh *et al.*, 2000). The direct use of meat from spent layers causes problem because the collagen content increase with age (Wu *et al.*, 1996). Spent layer has been used in

canned product such as soup, sauces, stews and gracies or as stewing hens (Voller *et al.*, 1996). Ajuyah *et al.*, (1992) found spent layers to be high in n-3 fatty acids and suggested that they will be used in the development of health oriented further processed poultry product.

MATERIALS AND METHODS

The experiment was carried out at poultry unit of Teaching and Research farm, Ladoke Akintola University of Technology Ogbomoso Oyo State, Nigeria. Fifteen spent layers (Arco Black) were obtained from a commercial farm in Ogbomoso, the birds were of 20 months old fed on regular layer feed and of average weight of 1.2 kg. The birds were divided into 5 treatments of 3 replicate. Papain was extracted from unripe pawpaw fruit with little or no cost of obtaining the papain.

Processing procedure

The birds were processed manually and slaughter by serving the jugular vein and carotid artery at the ventral base of the head and allowed to bleed for about 2 minutes before they are scalded. They were scalded at a temperature of 80°C for about 30 seconds and defeathered by hand. The birds were eviscerated, washed, dressed and cut into primal cuts.

The breast and thigh meat were however used for further physio-chemical and sensory analysis, then the muscle were sliced in to fillets of about 1cm thickness and short deep cut of about 2cm length was made equally on each side of the muscle fillets to improve the penetration of the enzymes. The meats were then soaked in papain of different concentration of 0.25%, 0.50%, 0.75% and 0.10% and control as 0% for 30 minutes. After 30 minutes the meat were removed from the enzyme solution all at the same time and further analysis was carried out on the meat.

Cooking Loss

Samples of the meat were weighed and cooked at 80°C in water bath for 20 minutes and the difference in weight before and after cooking was calculated. The cooking loss was calculated based on this formular.

$$\text{Cooking loss (\%)} = \frac{\text{Pre - cook meat weight} - \text{post cook meat weight}}{\text{Pre - cook weight}} \times 100\%$$

Drip Loss

Unknown weight of meat was weighed and refrigerated for 24 hours. The meat was weighed again and recorded.

$$\text{Drip loss (\%)} = \frac{\text{Pre - chilling meat weight} - \text{post chilling meat weight}}{\text{Pre - chilling weight}} \times 100\%$$

Chilling Loss

The soaked meat was cut and freezed for a period of 24 hours, the weight before and after freezing was observed and recorded.

Thermal Loss

A soaked meat of 6cm in length was cut for each treatment and replicates and was cooked in water bath at 80°C for 20 minutes. The change in length before and after cooking was observed and recorded.

pH

The pH values are determined by the use of a digital pH meter, an approximately 10 g of minced meat was homogenized with 40ml of distill water using a tissue homogenizer.

Chemical properties

The meat was subjected to proximate analysis to test for crude protein, crude fiber, ether extract and ash. Chemical properties were determined according to the Association of Official Analytical Chemists (AOAC) method (2000).

Organoleptic properties

This was conducted using a 10 semi-trained panelist according to the procedures of AMSA (1995). Samples from each treatment were wrapped in polythene nylon which could not be destroyed by cooking process and were tagged for easy identification. The samples were cooked in a water bath with no spices added to the meat for 20 minutes at 80°C and was served to 10 semi-trained panel drawn from students and staff both in the Department of Agricultural Economics and Department of Animal Nutrition And Biotechnology, Ladoké Akintola University Of Technology, Ogbomosho, to evaluate the samples for colour, juiciness, tenderness, odour and general acceptability. The assessment was based on a 9 point hedonic scale. The score was arranged in a descending order, the maximum was 9 and the minimum was 1.

Statistical analysis

Data obtained are subjected to analysis of variance (ANOVA) using SPSS (2000) computer package.

RESULTS

The result of the physico-chemical properties of spent layers meat tenderized with papain was revealed in Table 1. From the table, the result shows that pH increases at T₃ (6.47) and later decreases at T₄ (6.07) and T₅ (5.83). Thermal loss, cooking loss, drip loss, and chilling loss were significantly (P < 0.05) affected by papain. The value obtained for ph shows that T₃ (6.47) was significantly higher than others, while the value obtained for thermal loss shows that T₁ (36.11) was significantly (P<0.05) higher than T₂ T₃ T₄ T₅. The value obtained for drip loss shows that T₅ (17.22) was significantly (P<0.05) higher than others, for cooking loss the value shows that T₄ (66.85) was significantly (P<0.05) higher than others while the value obtained for chilling loss shows that T₃ (12.16) and T₄ (12.54) were higher and the least was T₁ (7.64).

The crude protein ranges from 23.30 to 28.90 where T₁ has the highest value and T₅ has the lowest value for crude protein. The value obtained for ether extract shows that T₁ (12.00) has the highest value and T₃ and T₄ has the lowest value. The value obtained for ash content ranges from 2.07 to 1.77 for which T₅ (2.07) was rated highest and T₃ (1.77) was rated lowest, the significant differences were observed between T₁ (2.01), T₂ (1.89) and T₄ (1.86).

Table 1. Physico-chemical properties of spent layers meat tenderized with varying levels of papain.

Parameters (%)	T ₁ (0.00 %)	T ₂ (0.25 %)	T ₃ (0.50 %)	T ₄ (0.75 %)	T ₅ (1.00%)	SEM
Ph	6.27 ^a	6.27 ^b	6.47 ^a	6.07 ^c	5.83 ^d	0.03
Thermal loss	36.11 ^a	26.67 ^b	21.11 ^c	25.00 ^{bc}	30.00 ^b	0.98
Cooking loss	25.39 ^d	58.89 ^b	52.56 ^c	66.85 ^a	65.55 ^a	2.93
Drip loss	7.67 ^c	9.42 ^c	13.47 ^b	10.59 ^c	17.22 ^a	0.61
Chilling loss	7.64 ^b	8.37 ^b	12.16 ^a	12.54 ^a	9.06 ^b	0.44
Crude protein	28.90	28.14	26.50	24.76	23.30	
Ether extract	12.00	11.00	10.00	10.00	11.00	
Ash	2.10	1.89	1.77	1.86	2.07	

^{abcd} Means on the same rows with different superscript are significantly different (P<0.05)

Result on the organoleptic properties of spent layers meat tenderized with varying levels of papain

The result of the organoleptic properties of spent layers meat tenderized with papain was presented in Table 2. The results shows that the flavor was not significantly (P<0.05) affected.

However, colour, juiciness, ease of fragmentation, apparent adhesion, residual after chewing and acceptability were significantly ($P < 0.05$) affected. The value obtained for colour shows that T_4 (9.40) and T_5 (8.50) were significantly ($P < 0.05$) higher than others. The values obtain for juiciness shows that T_4 (5.80) has the highest value while T_2 (4.60) has the lowest value and little significant differences between T_5 , T_3 and T_1 .

For Ease of fragmentation, the value obtained shows that T_2 , T_3 , T_4 and T_5 were significantly ($P < 0.05$) higher than T_1 . The value obtained for apparent adhesion shows that T_2 , T_3 , T_4 and T_5 were significantly ($P < 0.05$) higher than T_1 which is the control. The value obtained for residual after chewing shows that T_4 and T_5 were significantly ($P < 0.05$) higher than others while values obtained for the overall acceptability ranges from 4.00 to 6.40 and T_1 (6.40) was the highest and T_5 was the lowest.

Table 2: Organoleptic properties of spent layers meat tenderized with varying levels of papain.

Parameter	T ₁ (0.00%)	T ₂ (0.25%)	T ₃ (0.50%)	T ₄ (0.75%)	T ₅ (1.00%)	SEM
Colour	5.80 ^b	6.00 ^b	5.60 ^b	7.40 ^a	8.20 ^a	0.25
Flavour	5.80	5.40	5.00	4.40	4.20	0.25
Juiciness	5.20 ^{ab}	4.60 ^b	5.60 ^{ab}	7.20 ^a	6.60 ^{ab}	0.33
Ease of fragmentation	5.40 ^b	6.80 ^a	7.20 ^a	7.40 ^a	7.20 ^a	0.22
Apparent adhesion	4.40 ^b	6.20 ^a	6.20 ^a	7.00 ^a	6.80 ^a	0.27
Residual after chewing	4.00 ^b	5.60 ^{ab}	5.80 ^{ab}	6.80 ^a	7.00 ^a	0.32
Acceptability	6.40 ^a	5.40 ^{ab}	4.40 ^{ab}	4.80 ^{ab}	4.00 ^b	0.33

^{ab} Means on the same rows with different superscript are significantly different ($P < 0.05$)

DISCUSSION

The addition of proteolytic enzyme papain will cause softening of muscle tissue resulting in increased tenderness and significantly water content of the meat treated with papain (Sinku *et al.*, 2003). This also account for the higher value obtained in the cooking loss and the thermal loss for the treated samples with papain compared to the control, the cooking and thermal loss increases as the inclusion levels increases, as papain is highly aggressive, indiscriminate enzymes causing significant degradation in both myofibrillar and collagen proteins, yielding protein fragment of several sizes thus increasing meat tenderness (Swatland, 1984). The value for drip loss and chilling loss showed that there is an increase in their value as the inclusion levels increases and this implies that the ability of the meat to bind water will increase due to the tenderization effect of papain which results in meat tenderness as muscle fibers are filled with intracellular sarcoplasm, which is a liquid made up of approximately 80% of water as well as proteins, lipids, carbohydrate and inorganic constituents (Chan, 2011). The pH rated shows that T_5 (5.83) was more acidic compare to others, this was attributed to its inclusion rate that was higher and the pH near 5.7 was desirable for maintaining quality of poultry breast meat (Khan and Natamura 1970).

The crude protein content of T_1 , T_2 , and T_3 were higher than that of T_5 . The difference in crude protein could possibly be due to the variation in the inclusion level of papain used, as myofibrillar proteins such as contractile proteins, regulatory proteins and cytoskeletal proteins (Aberler *et al.*, 2001) are faster hydrolyzed by papain when they are in denatured state (Rattrie and Regenestein, 2000). The ether extract and ash content of T_1 and T_5 were higher than others and this shows that they have a high fat and mineral content than others.

Most enzymes used in tenderizing tough meat often degrade the texture of the meat, due to the broad substrate specificity and develop unfavorable taste due to over tenderization. (Cronlund

and Woychikk, 1987). This is attributed to increase in colour, flavor, juiciness, ease of fragmentation, apparent adhesion and meat tenderness of meat tenderized with papain.

CONCLUSION

Based on the report of findings of this study, it was concluded that the tenderization of spent layers with papain showed good potential for the utilization of tough meat. The product obtained, despite the undesirable colour, the meat has a good nutritional value and better texture. Findings in the present experiment in physico-chemical and organoleptic properties has significant increase in cooking loss, drip loss, chilling loss, color, flavor, residue after chewing and acceptability showed the effective utilization of papain for tenderizing tough meat. Furthermore, the acceptability of colour can be enhanced by adding natural pigment.

RECOMMENDATION

It is recommended that papain is a good meat tenderizer which can be used in tenderizing tough meat and using the proteolytic enzymes at 0.25% do not have adverse effect on the physical, chemical and the organoleptic properties of the spent layer meat.

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Neoliberalism versus Neolaborism: Dystopia versus Utopia and the future of civilization

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ABSTRACT

The ideas of neoliberalism and neolaborism are illustrated using very simple and clear models of reality. What used to work about thirty years ago is no longer valid. Technological incorporation into the economy is forcing us to propose a novel way in which the economies of the world should be managed. The excesses of neoliberalism are leading to a troubling dystopia. Neolaborism, on the other hand, is a new way to approach socioeconomic and political reality, with very practical recommendations and a utopian view of the future of human civilization.

Keywords: Neoliberalism, neolaborism, technology, computerization, productivity, labor.

INTRODUCTION

My wife and I decided to invite our niece to the beach before she committed to her Mormon mission. The important part came later, when we were at the airplane returning home. My wife and our niece sat next to each other on the left side of the plane while I shared the right side of the plane with a stranger. I am very curious and relentless, so I started what was supposed to be small talk conversation. We talked about the oil reforms made in Mexico as well as other matters of interest. At a particular point in the conversation, the man I was talking to said: “do you know what should be done?”. To which I replied: “No, what?”. Then he said: “We should kill all poor people”. For about two seconds of absolute terror, contemplating the simplicity and elegance of such “solution” posed by the way in which things have been going on during the last thirty years or so of neoliberalism, I sat uncomfortably quiet, having nothing to say about it. Then, with a sudden explosion of laughter, I said: “you cannot kill all poor people, you would never be done, because more poor people would pop up”. Regardless of the ethical considerations of no particular relevance in this case, this idea is precisely what the current socioeconomic and political trend of neoliberalism and globalization is going to lead us to. Killing people because they continue to reproduce having no increase in their productivity while at the same time keeping the money offer stable is precisely the dystopia the current way of affairs is taking us towards. This trip was the beginning of the end in the way I thought about the world. This paper is about the ideas I was forced to come up with in order to offer a reasonable and sound response to the “kill everybody” idea.

Neolaborism is a theory proposed by Copertari (2017) which argues that what really matters in an economy is not its Gross Domestic Product (GDP), but rather the total amount paid in the economy for salaries (to workers) and utilities (to investors). This is seeing the economy as a double-sided coin: the GDP which is the aggregated value of all the prices times the corresponding products produced in an economy on the one hand, and the money paid and circulated in the economy on the other hand. Neolaborism states that what matters is not the

value of what is produced but rather the amount paid in salaries and utilities in an economy. My aim in this paper is to easily explain my ideas using simplifying models of reality that not for being simple means they are less accurate.

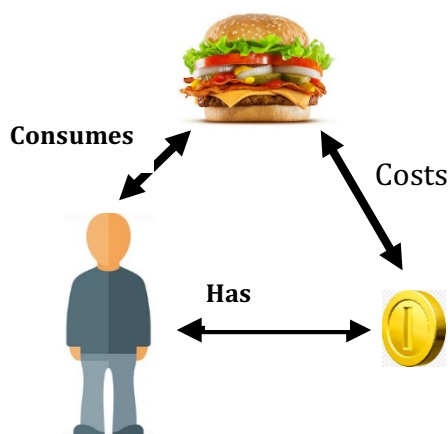
A MODEL FOR SOCIOECONOMIC REALITY

I am an engineer and a scientist. As a scientist I aim to seek the truth. As an engineer I crave for practical solutions to problems. The theory on Neolaborism (Copertari, 2017) attempts to provide an academic response to this challenge. This paper, however, attempts to clarify things by simplifying (but not reducing) reality in order to clearly explain my ideas.

We need to portray reality with a simplifying model, without losing important details while doing so. Suppose for a moment that the entire population of the world is represented by one person. Also, suppose that the entire money offer in the world is represented by a one-dollar coin¹. Finally, the entire production of the world consists of one hamburger. In this case, the person portrays everybody: people with employment, people without employment, students, entrepreneurs, government officials, politicians, children, the elderly, and so on. Also, the one-dollar coin represents all of the money offer in the world. And the hamburger represents the entire production of all goods and services in the world (see Figure 1).

Thus, the hamburger costs one dollar, which the person has because he works in order to produce such hamburger, which he/she is able to pay as a result of receiving his/her salary (or profit). So far, so good.

Figure 1. The starting simplifying model of the current socioeconomic order in the world.



NEOLIBERALISM AND INFLATION CONTROL

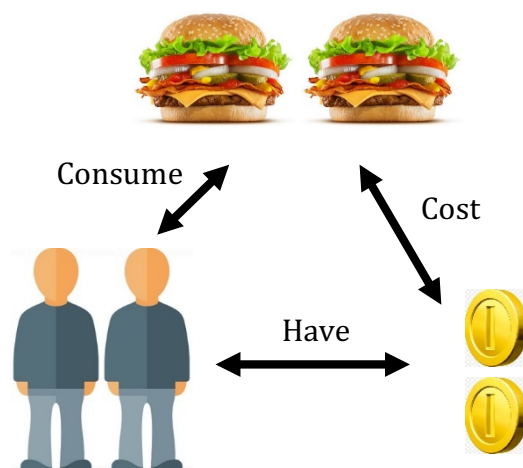
Neoliberalism (Harvey, 2005), which is the socioeconomic and political philosophy of more than the last thirty years, used to work just fine during the 80s and peaked during the 90s and perhaps even part of the 2000s, but it is certainly showing signs of exhaustion during the 2010s (Harvey, 2014). Nevertheless, let us not forget that Reaganomics propelled the western world to “victory” over the Soviet Union (its collapse) and the ideas surrounding communism based on a totalitarian regime. More importantly, it marked the end of the “iron curtain” and the Cold War. But the Cold War has been over for about two decades now.

What has Reaganomics promoted? It freed market forces to produce as much as they can with the available technology. In terms of our simplifying model, it increased production while

¹ It is of no relevance whether one-dollar coins exist or not. In this case they simply represent money.

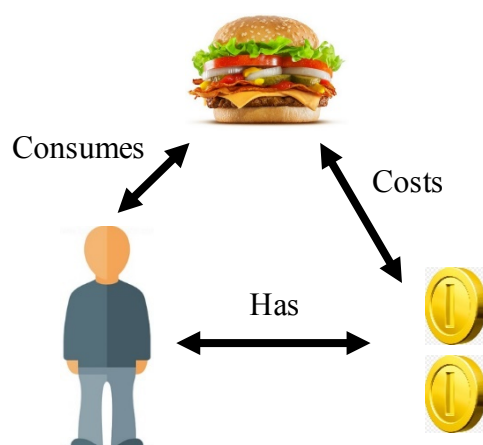
keeping demand relatively constant. In an ever increasingly globalized world, with fierce competition and free markets everywhere, outsourcing even the smallest parts of the production system, neoliberalism has reached its peak. It is time for change. But, what change precisely? Figure 2 illustrates neoliberalism properly working. The population doubles, which results in doubling the production of goods and services and allows duplicating the money offer without causing inflation. Figure 2 is basically the same as Figure 1 with the exception that there is a doubling of everything.

Figure 2. Neoliberalism properly working.



The key concern in neoliberalism is to avoid inflation by keeping the money offer down. What would it happen if the money offer doubles having the same population and the same production, as illustrated in Figure 3? Well, now we have two dollars made and earned by the same person, who still has only one hamburger to consume. Clearly, this leads to inflation, since now one hamburger costs two dollars (see Figure 3) instead of one dollar (see Figures 1 and 2).

Figure 3. Inflation in the typical socioeconomic order.



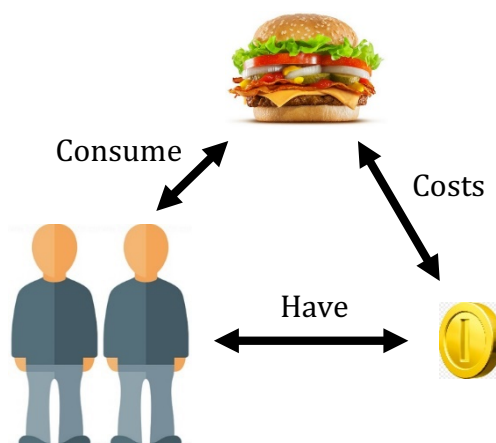
TRADITIONAL GROWTH MODEL EXHAUSTION IN A TODAY'S GLOBALIZED WORLD

The emphasis on keeping inflation under control worked in the past because there was a considerable lack of production. The vibrant and thrusting capitalism of the 80s and 90s basically doubled everything in the system. But now, production plants tend to sit partly idle or at least they have a huge growth potential not being used. The promotion of the supply side of

the economy is not working anymore, because in the past there was an excessive demand. People had an easy way of living and it was easy for people to find any kind of job allowing them to afford a comfortable life. This became the basis for the “American dream”.

But not anymore. People work harder to make the same salary in order to afford the same (if not less) amount of goods and services. This situation is illustrated in Figure 4. Now we have two people with one dollar and one hamburger. Clearly, each one has the right to claim half a dollar to purchase half a hamburger.

Figure 4. The exhaustion of the traditional neoliberalism model in a globalized world.

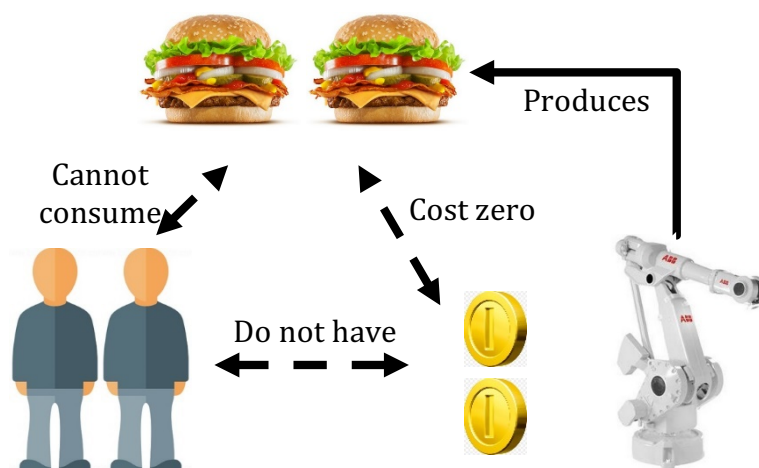


THE DYSTOPIA OF NEOLIBERALISM AND TECHNOLOGICAL IMPROVEMENT

If the *status quo* continues as it is, and as technological improvements, particularly in Artificial Intelligence (AI) and the computerization of the workforce start to substitute human labor (Frey & Osborne, 2013), things begin to look very bad and the idea of “killing all poor people” start to make an awkward sense.

Figure 5 illustrates the dystopia of neoliberalism policy. Now we have two people, two dollars and two hamburgers. However, there is a robot that performs all the labor people used to do in producing the hamburger. Since people are no longer needed, they have no job and, as a consequence, receive no money for their work. For people having no money means nobody can buy the two hamburgers, since the robot requires no payment and no food. We have a situation that should be a utopia: people having money and food without the need for working. Instead, we have a dystopia: people are no longer required as part of the economy and so they become useless. Who would ultimately be in charge and benefit from the work of the machine is not clear, but certainly the reason why I lived through two seconds of complete panic when facing the idea of “killing all poor people” becomes clear.

Figure 5. The dystopia of neoliberalism if the *status quo* continues.

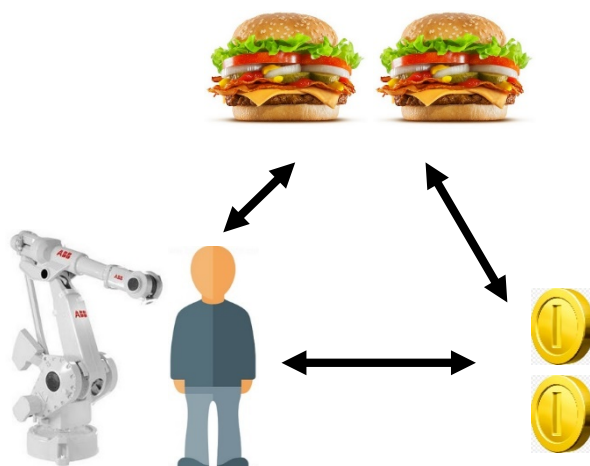


WORKING HOURS REDUCTION: A REASONABLE POSSIBILITY FOR THE FUTURE

What should the solution to the problem posed in the previous section be? Clearly, people should not be left out of the socioeconomic system. People should be empowered by technology, not replaced. If the introduction of technology into the workforce is carried out while people continue to produce, this time aided by technology, which increases their productivity, there should be no problem.

Figure 6 illustrates this alternative situation. Now there is one person producing two hamburgers with the aid of one robot. Since two hamburgers are produced, in order not to have deflation, two dollars exist in this economy. Thus, each hamburger continues to be worth one dollar, and since the robot does not require such product or service, the person now has two hamburgers at his/her disposal. Apparently, this is the best situation, but it is not. Consumerism continues to be promoted. Now there are two hamburgers in the economy, which means more resources (raw materials) are required and more contamination (damage to the environment) is created as a result of an increase in the economic activity.

Figure 6. Merging man and machine in the socioeconomic system.



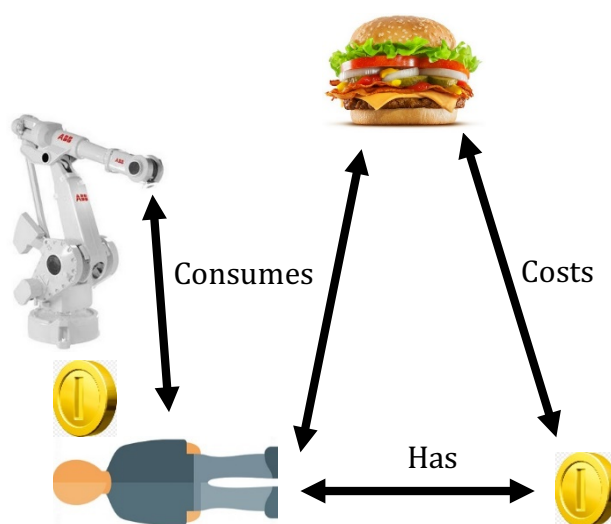
How could we practically reach this kind of situation, even if troubling for the environment? Remember that increasing the money supply (doubling it in this case) while at the same time

increasing production (also doubling it) does not create inflation. Neolaborism proposes that a practical path towards the situation depicted in Figure 6 could be to reduce working hours. If labor time is reduced, say, by half, while productivity is maintained, it means in reality doubling the salary, because now one person can have two jobs paying both the double amount of money they used to while working the same amount of time. Reducing working hours is also a good idea, because people need time to devote themselves to a capacitation program that would empower them in the use of the new technological tools incorporated into the workforce.

THE UTOPIA OF NEOLABORISM

What is a utopia? It is something that people can aim at, without perhaps never reaching it in practice. What is a utopia good for? I know that if I approach my utopia by walking ten steps, the utopia always remains in the horizon by getting farther away by ten steps. So, what is the reason for having a utopia? Precisely that, to keep walking.

Figure 7. The utopia of neolaborism.



The utopia of neolaborism is illustrated in Figure 7. In this case, the person produces one hamburger by working half the time. This case is ideal for the environment because it does not require more resources to produce more hamburgers (just one hamburger is produced). But there is also a robot. In this case, the robot gives massages to the person (having the production of a service instead of a commodity, with minimum impact on the environment). Thus, now the economy can have two dollars without creating inflation. The first dollar is used to purchase the hamburger. The second dollar is used to pay for the massage. Who receives the payment? Well, it would be the entrepreneur offering the service, who in this case is also represented by the one person pictured here. Thus, people can live a better life, the economy grows, inflation is not created, and the environment is not further damaged.

DISCUSSION AND CONCLUSION

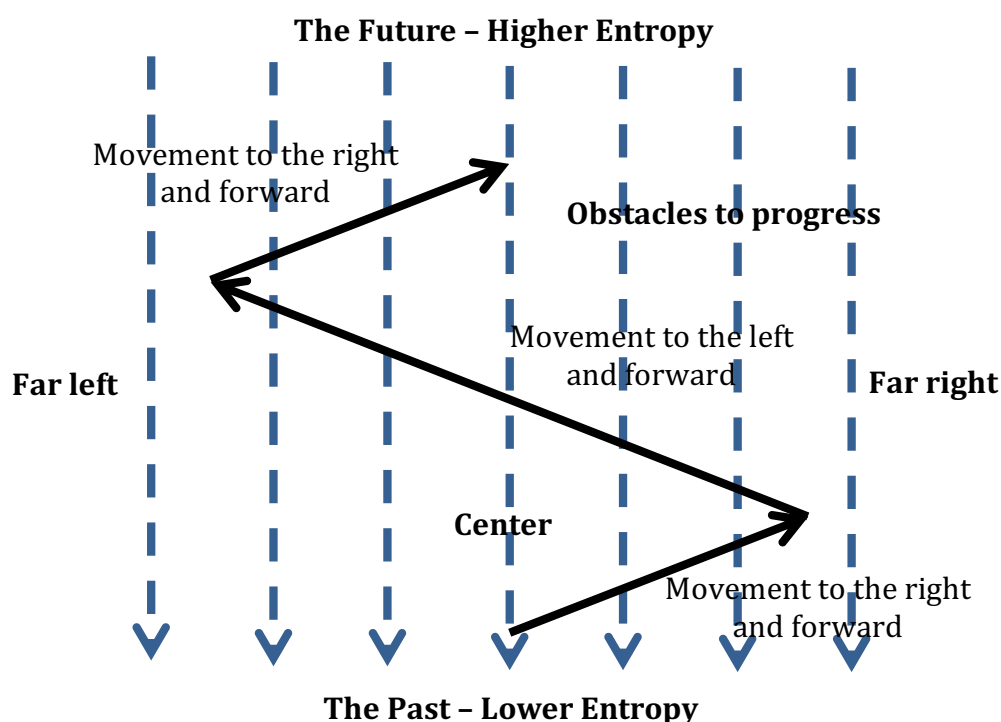
I believe not capitalism nor technology are the problem, that the system can change by changes within the system itself (Reich, 2016). Part of the solution may be innovations in the way money functions (Lietaer & Dunne, 2013; Greco, Jr., 2009). The problem is how we apply technology in a capitalistic system. I think capitalism has the capability within itself to transform its ways into a new form of economy that is not capitalistic nor communistic, but rather blends the advantages of both, while at the same time keeps in control their flaws.

One major advantage in capitalism is the market mechanism. However, the market mechanism requires intelligent guidance that should not become totalitarianism. It is important to continually debate and test new and old ideas. For this reason, a believe a fully functional and healthy democracy is useful, although not indispensable at least not in the short to medium term. Nevertheless, when considering the long term, a democratic system that allows for the peaceful transition from right-oriented to left-oriented governments, and back and forth again, is very useful.

The progress of civilization seems to occur in the same way a sailboat advances against the wind: moving towards the right and forward, then moving towards the left and forward, and so on, advancing in zigzag into the future, in a series of moves that ultimately lead civilization to progress (see Figure 8).

The idea illustrated in Figure 8 constitutes my political philosophy. Sometimes it is necessary to move towards the right, while in some other times it is necessary to change towards the left, but always trying to keep the forward direction. This means in practice to avoid destroying the achievements of the right during the movement to the left transition period, as well as avoiding destroying the progress of the left during a transition towards the right. A right oriented arrangement tends to promote the forces of the market. A left oriented arrangement tends to promote the forces of the state. Both are needed in more or less degree in different historic times. The trick of civilization success is to support the correct approach without destroying past achievements.

Figure 8. The zigzag progress of human civilization towards a better future.



There is something called the arrow of time. It is the direction of time for the physical laws of the universe, at least from a statistical point of view (Hawking, 1988). Time flows towards the future, towards systems with increased entropy. Entropy is the degree of disorder existing in a system. To illustrate using the typical example, consider having two containers. One is empty, the other is full with a highly pressurized gas. What is likely to happen? The usual would be for the gas in the highly pressurized container to escape and occupy both containers. This is the

direction of increasing entropy and towards the future. It would be extremely statistically unlikely for the gas to accommodate in the original container by itself. Doing so requires the expenditure of energy, and the production of such energy requires increasing the entropy of an even larger system encompassing all of the above. Another example is having an egg resting on the corner of table (Penrose, 2014). The most likely thing that can happen is for the egg to fall to the ground. If we see two pictures: one with the egg resting in the corner of the table and the other one resting broken on the floor, it is easy to realize what happened first and what is the arrow of time.

In the case of socioeconomic and political societies, moving towards the future implied increasing entropy, and as a consequence, the overall degree of chaos in the system. That is why moving forward into the future leading to a better situation requires a lot of work in order to ensure that, although the overall system has increased its entropy (being the overall system Earth and the Sun, where the Sun burns hydrogen, increasing its entropy, and Earth borrows part of that entropy credit), the socioeconomic and political systems are, although more complex, also more ordered, with lower overall entropy. That is the reason why it is so easy to destroy and so hard to create and build a better future.

The market and neoliberalism thinking tend to promote free entrepreneurship at the expense of increasing inequality (Stiglitz, 2013). Regulations and neolaborism tend to promote government investment in necessary kinds of infrastructure and education, required so that the free forces of the market can act by themselves in the direction of human progress.

Technology is not evil by itself. It is simply a tool that should be applied intelligently, at the right moment, and in the correct place and circumstance.

Neoliberalism is a manifestation of a movement towards the right. But I believe that now the time for neoliberalism is mostly over. Today, a transition to neolaborism is required, keeping in mind that the neolaborism recipe will not last forever. We may reach a point where reduction in labor hours becomes ridiculous, such as someone having eight different jobs lasting one hour each and flipping from one job to another with a simple mind decision sent to our intelligent agents working in collaboration with us. The human brain, even if enhanced, has practical limits.

The technological danger of computerization of the workforce is not all that problematic as having an artificial mind able to create previously unknown technology out of the blue by quickly and efficiently learning all that is known to science. Keep in mind that technology is simply a tool and letting potentially dangerous new technology loose in the world is a risk. But, what are the odds of creating a truly intelligent artificial mind?

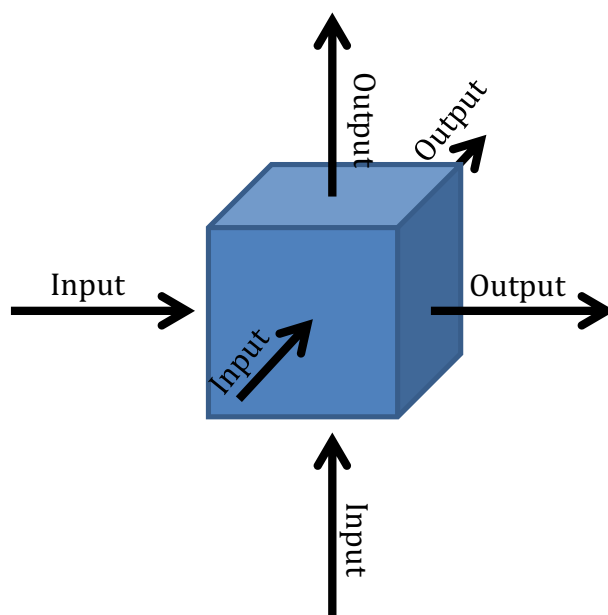
Moravec (1999) estimates that the information processing speed of the human brain is 100 million MIPS², that is 100'000,000'000,000 instructions per second. Current personal computer processing speeds, such as the computer I am using now have a processing speed of around 2 GHz, which equals 2,000'000,000 instructions per second. That means that in order to have the same information processing power of one human brain, we would need $100'000,000'000,000 / 2,000'000,000 = 50,000$ personal computers properly wired to do parallel processing such as the one carried out by the human brain.

² MIPS are million instructions per second. One instruction corresponds to one simple processor operation, such as doing one simple sum (in binary format) or transferring one number (also in binary format) from one memory address to another.

There are several models of how the human mind works (Kotseruba, Avella González & Tsotsos, 2016). Even if we had the right kind of computer cognitive model or combination of cognitive models, working with 50,000 computers is near to impossible. We need computers that are one thousand times faster and yet remain having the same price per computer to make the project plausible, requiring in such case properly wiring only 50 computers. I believe this is the reason why an artificial mind has not yet been constructed in practice. But there is cause for optimism. The Defense Advanced Research Projects Administration (DARPA) is trying to improve processor performance among other things (IEEE Spectrum, 2018). Maybe in a few decades scientists will have the required processing power in order to build an artificial mind.

But multiplying personal computer processing speed by a factor of 1,000 is not an easy task. Typical processors are flat and have their input on one side and their output on the other. By having a computer processor in the shape of a cube would allow to multiply processing power by a factor of three, since there would be three times the input/output operations (see Figure 9). Achieving a thousand-fold increase seems very difficult. The typical process of transistor miniaturization is being exhausted, and new architectures and ways to design electronics is required.

Figure 9. Computer processor in the form of a cube.



In conclusion, we are approaching the limits of neoliberalism. We need a change towards the left so that humanity can continue progressing towards a better civilization. One practical way of start doing that would be to reduce working days from five to four. There are seven days in a week and working four out of seven days means almost cutting by half labor times, if we consider the case of people working all seven days in a week. Since working days would be four per week, somebody working almost twice that much should be able to claim double the salary (keep in mind that the remaining three days should be paid extra for not being part of the regular workdays). I believe we will eventually reach this situation.

Furthermore, as computers make people more and more productive and tend to do the work for us, the day will come when the success of an economy is not measured by how low the unemployment percentage is, but rather by how small the employment percentage is (Domingos, 2015).

I cannot predict the future, but the creation of a sentient machine ushering a whole generation of new technologies is not necessarily a bad thing as long as such machine is also aware of the peril (and not just the promise) of new scientific and technological breakthroughs, so that it releases its inventions in a way humanity can positively absorb. In any case, the creation of a sentient machine is not necessary for the possibility of disruptions. The natural progress of AI and Machine Learning (ML) will continue and it will be introduced in the socioeconomic environment. But that does not justify taking a defensive position. As a rule of thumb, we should avoid being dogmatic and try to approach reality in a practical way, understanding that it is possible to find ways to have coexisting what used to be seen as contradictory positions, such as democracy versus totalitarianism, right versus left, and so on. As usual, the answer to our problems will tend to be a different and intelligent combination of apparently contradictory approaches.

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From Networking To Nepotism: Systemic Racism And The Paradox Of Academic Networks

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ABSTRACT

The phrase “it’s who you know, not what you know that counts” is often heard in conversations about people who get ahead. In academic circles, this concept translates into what is often called “networking”. The daily life of the graduate student in US universities hinges on the individual’s ability to interact and form strategic alliances with other members of the academy. Indeed, networking is a widely accepted norm within higher education and commonly practiced by well meaning progressive scholars in the academy; but few, if any, have examined the ability of such a practice to exclude certain groups and individual students from active academic participation. It is very common to hear scholars’ advice students and especially junior faculty, to try to “network” with particularly the “well connected” and “powerful” scholars in their fields of study. But what exactly does networking entail? What are the factors that influence people’s networking practices and how do these factors favor or disadvantage individuals or groups in the networking process? This paper examines how systemic racism influences networking practices in US colleges and Universities and how that affects the lived experiences of female African students at a major research university in the US. , I focus on the racialized nature and paradoxes of “networking” in higher education in order to show that such an idea and practice contribute and or form part of the institutional structure that works to oppress, dominate and marginalize racial minority groups and individuals within the academy. I argue that the idea of “networking” in higher education is yet another name for intellectual “nepotism” within the context of systemic racism.

Key Words: International Students, Higher Education, Nepotism, Systemic Racism, Networking.

INTRODUCTION

Indeed, networking is a widely accepted norm within higher education and commonly practiced by well meaning progressive scholars in the academy; but few, if any, have examined the ability of such a practice to exclude certain groups and individual students from active academic participation. It is very common to hear scholars’ advice students and especially junior faculty, to try to “network” with particularly the “well connected” and “powerful” scholars in their fields of study. But what exactly does networking entail? What are the factors that influence people’s networking practices and how do these factors favor or disadvantage individuals or groups in the networking process? This paper examines how systemic racism influences networking practices in US colleges and Universities and how that affects the lived experiences of female African students at a major research university in the US. , I focus on the racialized nature and paradoxes of “networking” in higher education in order to show that such an idea and practice contribute and or form part of the institutional structure that works to oppress, dominate and marginalize racial minority groups and individuals within the academy. I argue that the idea of “networking” in higher education is yet another name for intellectual “nepotism” within the context of systemic racism.

The significance of this problem lies in its contribution to our understanding of how social and institutional structures (characterized by systemic racism) within US colleges affect the nature of international students' experiences in these institutions. Considering the changing demographics of contemporary higher education institutions in the United States, and the emphasis universities place on internationalizing and diversifying their institutions, it is important that we understand the differential impacts of certain norms and practices within our schools on different populations that we admit.

The purpose of this paper is to turn the discussion about international students' experiences in US institutions away from individual students' cultural and interpersonal differences to focus on the institutional structures that place them in certain locations within our schools. The aim here is to examine how systemic racism influences the nature of international students' interaction with their peers, professors and academic staff in their host institutions and the impact of that in their networking practices.

In pursuing the following objectives, I ask the following questions; what and how is networking practiced in academic institutions? How does systemic racism affect the process of networking for racial minorities like female African graduate students and how do they negotiate/navigate the process of networking in their academic and social interactions? Answering these questions ultimately address the underlying assumptions, nature and implications of networking for specific groups of students in higher education.

RESEARCH ON INTERNATIONAL STUDENTS' EXPERIENCE.

There is no gainsaying that higher education has increasingly become international, and foreign students are among the visible elements of this internationalism. A significant change in contemporary higher education is a substantial increase in the number of international students (IS) in the United States. Attracting international students has become a priority for U.S. universities regardless of size or location. In fact, in this era of globalization¹ and also in the face of dwindling public funding of higher education and declining home student enrollments especially in post graduate studies in certain fields, many universities and colleges in the United States are making great efforts to develop and expand international activities, study abroad programs and student and faculty exchange programs not just for the tuition dollars international students bring in to keep universities alive, but also for the cultural diversity they bring to campus. But one has to ask, what it is like for international students to study in US higher education institutions? How do they negotiate and navigate the complex structures within these institutions that are often marked by institutional racism?

Indeed, current research on international students' experiences pursuing higher education in the US, has yielded a large body of literature that tends to concentrate on one or more discrete elements of adjustment issues-- coping strategies, social-cultural factors and university support systems without a meaningful integration.

International students are a diverse group, but they have often been spoken about in academic literature and in academic conversations as an entity, rather than as individuals with a range of personal histories and experiences, and a range of personal motivations and desires (Koehne, 2005). The dimensions of international students' adjustments have been described in multiple

¹ Bartell, M. (2003) notes that recent global, competitive environmental forces have created unprecedented challenges for higher education institutions to internationalize, owing to the instantaneity in communication and rapid advances in transportation which result in an increased need for intercultural and international understanding and knowledge.

ways, ranging from academic, social-cultural, interpersonal, financial, linguistic, psychological and practical-e.g. Food, housing and transportation (see Tomich, et al. 2003, Al-Sharideh & Goe (1998), Koehne 2005, and Hsieh,2006). In all of these studies, the international student is always the site and object of analysis where the nature of their experience is located within the students' strengths and weaknesses. Most of these studies tend to address the factors of international students' experiences from a deficit view of international students as bearers of problems who come with limited language proficiency, minimal independent and critical thinking skills and needing to adjust to our academic system.² Very little is written about how the social, cultural and structural contexts of host institutions prepare to accommodate the diversity of international students and the material and experiential realities of these students as they navigate their ways through our school systems. In the US context where higher education has historically been marked by racial tensions and other forms of institutional stratifications, we need to understand how students lived experiences within and outside the school environment affect their engagement with and disengagement from that environment. This paper is an effort to do just that. It examines how systemic racism in US institutions affects the lived experiences of female African students at a major research university. I focus particularly on how the practice of "networking"(understood here as the practice of forming alliances for intended returns or benefits) in higher education is influenced by systemic racism and how such a practice excludes or marginalizes students from racial minority backgrounds.

NETWORKING IN HIGHER EDUCATION

The phrase "it's who you know, not what you know that counts" is often heard in conversations about people who get ahead. In academic circles, this concept translates into what is often called "networking". The daily life of the graduate student in US universities hinges on the individual's ability to interact and form strategic alliances with other members of the academy. Indeed, networking is a widely accepted norm within higher education and commonly practiced by well meaning progressive scholars in the academy; but few, if any, have examined the ability of such a practice to exclude certain groups and individual students from active academic participation. It is very common to hear scholars' advice students and especially junior faculty, to try to "network" with particularly the "well connected" and "powerful" scholars in their fields of study. But what exactly does networking entail? What are the factors that influence people's networking practices and how do these factors favor or disadvantage individuals or groups in the networking process?

Similarity breeds connection! This principle is known as the homophily principle, which structures network ties of every type including different ties in higher educational institutions. The principle of homophily asserts that people who are similar to one another along certain socio-demographic dimensions are more likely to interact than people who are dissimilar (McPherson, Popielarz, and Drobnic 2001). Common sense and casual observation tell us that social groups are not random samples of people. Blau (1977) has argued that socio-demographic dimensions such as age, sex and education shape the social interactions between individuals in society. Depending on the processes of historical and institutional constructions, each society structurally provides unequal opportunities to members of different groups defined over race, gender, and class. Several empirical studies have shown a direct relationship between network characteristics on socio-economic standings (Huang and Tausig 1990. see also, Lin, 1999a, 2000). In a study about how network systems affect people's social capital, Nan Lin (2000) observes that significant differences appear in the social networks and embedded resources between females and males. In a similar study, Lin (1999) notes that

² Carroll, J. & Ryan J. (2005). *Teaching international students: Improving learning for all*. New York: Routledge

inequality of social capital occurs when a certain group clusters at relatively disadvantaged socioeconomic positions.

In Lin's analysis;

"Social groups (gender, race) have different access to social capital because of their advantaged or disadvantaged structural positions and associated social networks. Situated in different positions in the social hierarchy, and given the tendency to interact with other members of the same social group, members of a disadvantaged group may find themselves deficient in social capital. Inequality in social capital, therefore, can be accounted for largely by structural constraints and the normative dynamics of social interactions"(2000, p.793).

In US higher education, there is an expectation that individuals should be able to "network" with others. The structure of these institutions is such that almost everything ranging from class exercises/assignments to resource allocation to research publications center on this practice. Part of the requirements of graduate study involves students' selection of a committee of faculty to work with during the different stages of their programs. But the reality of the process of networking in the United States is not devoid of the historical tensions that revolve around race, gender and class relations and other forms of divisions.

According to McPherson, Smith-Lovin and Cook (2001), race and ethnicity are the biggest divide in social networks today in the United States and they play a major role in structuring the networks in other ethnically diverse societies as well. In their view,

"the baseline homophily created by groups of different sizes is combined with the differences in racial/ethnic groups' positions on other dimensions (e.g. education, occupation, and income) and the personal prejudices that often result from the latter to create a highly visible, oft studied network divide"(p.420).

Homophily limits people's social worlds in a way that has powerful implications for the information they receive, the attitudes they form, and the interactions they experience.

In an analysis of the significance of race in predominantly white US universities, Joe Feagin(2002) observes that despite the general ideal of the university as a place where knowledge can be exchanged among diverse populations without narrow-mindedness, intolerance and discrimination, the everyday realities of students of color on predominantly white universities portray a picture far from universities as "seats of wisdom and light of the world". Even though the demographic landscapes of colleges around the country are changing: a welcome trend that indicates a growing embrace of diversity by colleges, John Garland (2002) still observes that "higher education often focus on the formal aspects of diversity while permitting all of the substantive evils associated with chauvinistic attitudes to continue to thrive" (p. 38). He notes that the academy has focused on bringing more faces of color onto our campuses without paying attention to "the quality of their experiences, which includes stereotyping and other behaviors that have negative effects on people of color on our campuses" (p.38). So in order to understand how female African students in US universities and colleges negotiate their daily interactions with professors, students and staff, it is important to examine how the structural constraints and normative dynamics of social interactions and their socio-demographic dimensions as black, female and foreign students affect their experience.

SYSTEMIC RACISM³: A THEORETICAL FRAMEWORK

Jeo Feagin's research on race relations in US society asserts that the social foundation of US society is historically built on "white-on-black oppression" (2006, p.6). This long term racial oppression in his view is grounded in discrimination and consequent inequity. It has generated a racial ideology that accents the superiority of white Americans over all other racial groups (2002). According to him, white oppression of African Americans is archetypal because it is the original model on which whites' treatment of other non-European groups entering later into the sphere of white domination has largely been patterned" (2006 p. xi). US racial hierarchy, Feagin observes, is based on a continuum that "runs from the privileged white position and status at the top to an oppressed black position and status at the bottom, with different groups of color variously positioned" (p. 21).

Systemic racism according to Feagin, "encompasses a broad range of racialized dimensions of the US society: the racist framing, racist ideology, stereotyped attitudes, racist emotions, discriminatory habits and actions and extensive racist institutions developed over centuries by whites" (2006 p. xii). White racial frame is central to the persistence of systemic racism. He defines this frame as "an organized set of racialized ideas, stereotypes, emotions and inclination to discriminate"(p.25). This white racial frame provides a structural skeleton on which thought and action emanates. Most White Americans' racial frame includes negative stereotypes, images and metaphors concerning African Americans and other Americans of color on the one hand, and an assertively positive view of whites. This frame provides an encompassing conceptual and interpretive scheme that shapes and channels assessments of everyday events and encounters with other people (Feagin, 2006:p.26).

African students, like other groups of international students, arriving in US institutions are also positioned within this scheme of social interaction. Regardless of the interpersonal, socio-economic and linguistic qualities that international students bring to their education in the US, a full understanding of their adjustment experiences requires an analysis of the institutional contexts in which they study. My focus in this paper especially is on how this racial frame shapes the networking process and experiences of female African students in a major university in the US.

RESEARCH METHODS

The data for this paper is drawn from a pilot study of my dissertation topic on the experiences of female international students in US higher education. I interviewed a total of 18 female international students (12 of whom were African, 2 Indian, 3 Chinese and 1 Korean) over a period of three months during the spring and summer of 2005. For this paper however, I draw on the accounts of the African women but where necessary, I use excerpts from the other women to show where there is similarity of experience. I recognize that my use of "African" to represent these individual women from different countries in Africa is problematic to some degree. But in the US context, they are viewed as a group of black, female foreign students. I therefore use it in this sense to define them as a group who share a common experience in US institutions.

I decided to adopt an open-ended, informal style of questioning about their everyday life "stories" in my interviews. Prior to the interviews, I had engaged in informal conversations with most of the women regarding my desire and purpose of the project, pointing out that I

³ Feagin, J. R. (2006). *Systemic Racism: A Theory of Oppression*. New York: Routledge. This conceptual framework explains the centuries of white dominated oppression of blacks and other racial groups in the US.

was interested in sharing my own experiences with them so that together our common “patterns of experiences” will emerge from the discussions. Through these informal conversations I was able to develop significant rapport with the women as well as develop major themes on which subsequent conversations during the interviews were tailored.

SYSTEMIC RACISM AND AFRICAN WOMEN INTERACTIONS.

White Racial Frame and African women's networking

White domination is often rationalized by the belief that the inferiority or superiority of a group's abilities, values, and culture are linked to their physical characteristics such as skin color” (Feagin, and Sikes 1994; p. 4). Being black, female African students cannot escape the negative stereotypes among white professors and students about black inferiority so engrained in the US society. Such perceptions are often revealed in the differential treatment and responses toward African students by professors especially in classrooms. In their analysis of black students' experiences in predominantly white colleges and universities, Feagin, Vera and Imani (1996) observe that “the subtle and overt distinctions that are made in everyday interactions define the character of the social position one occupies in interaction with others” (p.94). In my interviews with female international students, this theme was echoed by many. An African woman describes her experience of indifference and marginalization in a graduate seminar taught by a white professor.

“I took this seminar on research methods with this guy....it was just three of us out of 11 students that were not white. The two of us who were black, one was an African American guy and the other student was Asian looking, she could have been bi-racial...I don't know that for sure, but I could tell by her Americanized accent that she probably was born here or grew up here...but anyway, it was just the three of us from non-white backgrounds. For the first six to eight weeks, I realized this man ignored every comment or contribution I made in class. Any time I raised a point, he will just keep quiet and either ask another student or move the discussion on to another focus. At first, I thought that was just his policy not to affirm or dispute any point of view that students raised, but as the class progressed, I noticed he would heartily commend the good points that the other white kids made but when I make a point, everybody acted like I did not exist in the class. But when the same point that I raised earlier is mentioned later by another student, the professor will make comments like “that was insightful”. At first, I thought maybe it was because I spoke in an accent that may not be understood, but as time went by; I just noticed it was a deliberate action to make me feel invisible”. (R.I., 5/24/2005)

This student went on to explain how she had to interrupt the discussion one day after a point she had made was ignored by the professor, only for another student to state the same point shortly after and received positive compliments by the professor.

“... But a few minutes later, another white girl basically repeated verbatim, what I said earlier, and this man went ecstatic with praise for the great insight the girl had...I just couldn't ignore it anymore”. (R.I., 5/24/2005)

To some white professors, the African woman in graduate school is nothing more than an accident of some diversity and or affirmative action policies. Unlike African American women who are vied as domineering, African women are perceived by white professors as timid and subdued creatures who lack self confidence and initiatives; two key ingredients necessary for a successful graduate study. A senior faculty in the college of education once told me during an interview for a research assistantship he advertised, that he finds it difficult to believe that African women can be self directing since they have lived all their lives under the yokes of their fathers and husbands.

"... You know this job requires self initiative and motivation (he said) and I find it difficult to imagine that the spirit you show here today can be sustained....I hardly come across African women andI think it's a total waste of resources to fund such women since their only purpose is to serve their husbands and give birth to numberless children".

It may be that this particular professor is just downright nasty and his actions may not reflect the majority who work with African students daily. But even the attitudes of well meaning professors sometimes convey nothing more than a lack of interest. Describing some of her experiences, an African student mother of three notes;

"you know, some times I don't know what to call the reaction that I get when I meet with some professors. You probably have faced such a thing before....where you go to meet with a professor, and after saying what you want to say for about 3 minutes, you get this attitude of 'what did you say'? It looks like as soon as you start to speak, they tune off their ears and minds.... In total black-out until you are done, then they turn back on as if they just recovered from some trance".

This "zoning out" attitude as some of us call it has become a common experience for many African women in US graduate schools.

African women in US institutions often have to contend with the burden of representing "all things African" in class discussions. Similar to the experiences of black American students in white colleges discussed by Feagin, and his colleagues, African women often find themselves in situations where they have to act as "defenders and explainers of their group"(Feagin, Vera, and Imani 1996). When white professors attempt to include minority students into class discussions, it is often done in ways that place enormous pressure on minority students to represent their entire social group as one African woman notes:

" I had this class where the professor will always ask me how do people in Africa do this or that....even when the issue is basically a general idea. I find it ridiculous that this woman would think that there is an African version to everything. I had to point out some day that examples I may give cannot even be representative of my country let alone the entire continent"(R.I: 6/27 2005).

What is interesting in the case of these women is the fact that their experiences are not only limited to their interactions with whites. Other non-European international students have come to share in the racial frame of blacks as intellectually inferior to others. One of my respondents shared her story about her friendship with a Chinese student;

"I once had a Chinese course mate ask me why African students are not as "smart", even though I had just finished rewriting her essay for her research specialization. I asked her what she meant by Africans not being smart and she pointed to the fact that there are no Africans doing the 'hard subjects' like engineering and science. I got so upset that day...." (R.I. 6/21/2005)

Although these accounts may point to individual prejudices and bigotry, it is obvious that such feelings, biases and stereotypes are widespread and ultimately influence the individual's ability to form meaningful alliances with others within the institution.

SYSTEMATIC DISCRIMINATION AND AFRICAN WOMEN.

In their work on how black middle class experience life in white working environments, Feagin and Sikes (1994) observe how subtle forms of exclusion work to bar blacks from professional positions. Quoting Thomas Pettigrew, they note that "racial discrimination is basically an

institutional process of exclusion against an out-group on largely ascribed and particularistic grounds of merit" (p.19). While whites may have the power to discriminate as individuals, they argue, much of their power to harm comes from membership in white-dominated organizations and social networks.

In one respondent's statements in their work,

"you may move into an environment and not know the rules, and therefore not know how to play the game and not know how to succeed....the barriers and obstacles are often that people will not allow you into the inner circle.the students who get the best grades are the students who know how to talk to the law professors. They know how to call on their fathers, brothers, and uncles to introduce them into the profession...." (Feagin and Sikes, 1994. p,141)

Like the respondent quoted above, African women experience similar exclusion from the inner circles within and outside of their departments. For these women however, the discrimination and racism they face is not only in the hands of white professors, students and staff as one respondent notes, "you would think that it is only whites who are always racists, but I can swear that the African Americans and Latinos are more vicious and blatant in their disdain for us than the whites".

This particular student goes further to explain the difference between "white racism" and "black racism" towards African students.

"the difference is that, for white professors and students, you are often seen as not smart enough to be in graduate school; let me even say that you are not considered to be human, you don't exist!...and when you have an occasion to prove that you might even be smart, you are still a backward person in their mind. But for the African Americans, you are often seen as a threat to their material and economic resources. You often hear comments like ' we(African Americans) fought for affirmative action only for you (Africans) to come and enjoy after you sold us(African Americans) out as slaves'. So because they believe that the benefits of what their ancestors toiled for should be reserved for only African Americans, they feel resentment that we are here today and some even think that we are better treated by the whites than they are". (R.I.: 6/19/2005).

It seems to me from the accounts of these women that while African women may experience discrimination from both white and black American professors and students, the reasons or motivations behind these actions differ between whites and blacks. On the one hand, whites view these women as inferior and not graduate material to work with. On the other hand, blacks see them as competitors over resources and opportunities they (African Students) do not deserve. Among other international students also, they are perceived as inferior; a view similar to the white group. All of these perceptions and actions overall limit mutual interactions and increase suspicion and tension between African women and other members within the academy. How this affects these women in how they network is the focus of the ensuing section.

NETWORKING AND AFRICAN WOMEN

Graduate study in the US is structured in such a way that individuals have to form or belong to some kind of group in order to survive. From class discussions or assignments to research assistantships to forming academic committees, students have to form alliances with other individuals in order to succeed. Unlike African American students in predominantly white institutions, African women do not usually have such avenues or organizations like study

groups, sorority groups or black cultural houses in which to interact and network with other African, or American students of color in order to develop effective coping mechanisms for their environment. In a situation where professors hold negative stereotypes about certain groups of students, it becomes difficult for such students to get closer to professors and for the professors to know the actual strengths and weaknesses of the students.

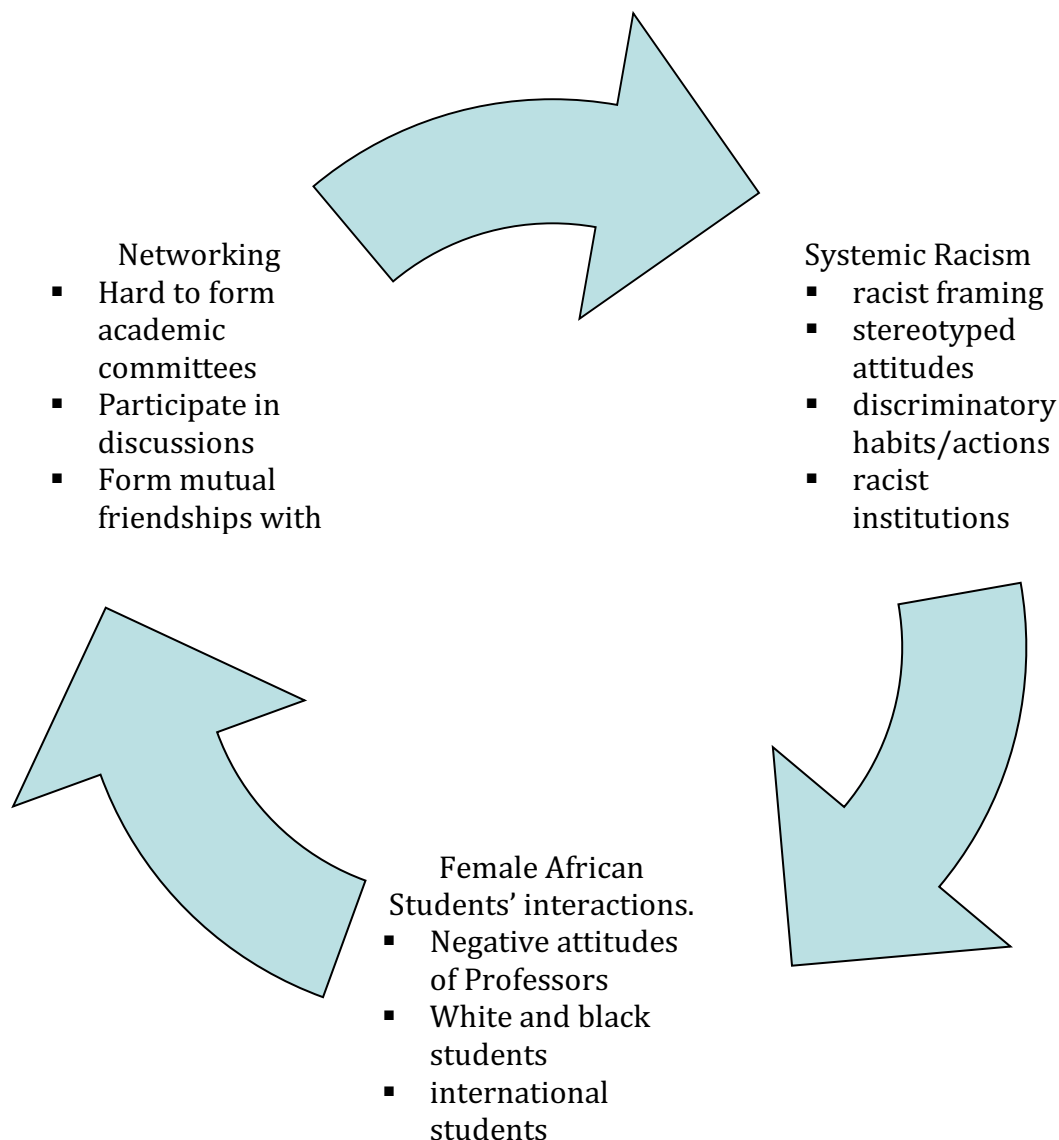
A general tendency in networking however is for individuals to interact and share sentiments with others who have similar characteristics (Lin 1982). Although African students in general are viewed in US institutions as a group, they vary greatly in language and cultural and almost every other demographic feature except the color of their skin (which is also questionable). In fact, when it comes to similar characteristics and the principle of homophily, African women are no more similar among themselves than they are to other racial groups in the US. So the idea that they are more likely going to network with other African students is a far fetched one. A sixth year graduate student succinctly describes this experience thus;

'it is not easy to discuss such painful experiences with other African students because, we all come from different countries in Africa and you know we also have our own ethnic tensions that we bring along to this country'.

In most cases, the individual's encounter with racism is often viewed by others as personal weakness of the person and may lead to further isolation and humiliation by other African students.

Overall, US higher education institutions are beset with racial and other forms of stratifications which affect the nature of interactions between groups of individuals. The limitations in mutual interaction in turn influence the nature of ties individuals' form which often turns out to be homogenous (comprising members from similar racial-ethnic and often gender backgrounds). This within group similarity prevents

This relationship between systemic racism, networking and female African students' interaction with other members within higher education institutions is further summarized in the conceptual model below.



NETWORKING OR NEPOTISM: WHERE IS THE LINE?

Nepotism in this paper is understood as favoritism or preferential treatment by people in power extended toward relatives. These may include friends and friends of family. Considering that resources, opportunities and rewards in higher education are distributed based on individual network ties, and bearing in mind that these ties are not necessarily open to anybody that wishes to join, I think it is fair to argue that networking in academic institutions is similar if not tantamount to nepotism. If as McPherson et al (1992) note, race and ethnicity are the biggest divide in social networks today in the United States, it will be a daunting task to say the least, for African women to form meaningful networks because, they are women, often mothers, mostly poor or from geographically poor locations, and black.

As Picca and Feagin(2007) note, discrimination often deny the existence of a structural problem and focus on reforming the victims or their cultural values. In a system that historically has denied people access to resources based on ascribed or constructed characteristics, it is dangerous if not hypocritical to blame international student's experiences on their cultural values or linguistic competence for what the structural arrangements have caused. In the current context of systemic racism in US higher education institutions, an adherence to the idea and practice of "networking" only works to exclude minority student populations from the material and social resources necessary for a successful education.

Networking in the context of a segregated structure is nothing less than an institutionalized form of nepotism.

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Blue Economy of Bangladesh: Opportunities and Challenges for Sustainable Development

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ABSTRACT

The blue economy refers to the economic activity based on maritime resources. The paper aims to explore the current scenario of sea resources of Bangladesh. Using secondary data, the study reveals that Bangladesh can accelerate its economic growth through the sustainable use of the sea resources. Moreover, Bangladesh has 710 km long coastline with 200 Nautical Miles of an exclusive economic zone inside the Bay of Bengal. Marine fisheries contribute 19.4% of the total fish production of the country. Besides, the western coastline of Cox's Bazaar is the longest sea beach in the planet that is visited by on an average, 81% of the international tourists arrive in Bangladesh. However, due to lack of institutional capacity and given the socio-cultural context, the sustainability of the sea resources is now facing critical threats. Apart from studying the present status of sea resources, the paper proposed some way forwards based on existing opportunities and challenges for promoting sustainable development in Bangladesh.

Key Words: Blue Economy, Bay of Bengal, Bangladesh, Sustainable Development, Longest Sea Beach.

INTRODUCTION

Blue Economy as an idea was first introduced by Professor Gunter Pauli in 1994. It achieved large amount of attention only in recent 2012 Rio+20 Conference. Blue Economy in Bangladesh is often mistaken as only the economic activities which taken place on ocean. Certainly oceanic economic activities are integral parts of Blue Economy but not all kinds of oceanic activities and not only oceanic activities are Blue Economy. A total of 26 marine economic functions can be recognized as integral part of the Blue Economy. Among them fishery, maritime trade and shipping, energy, tourism, coastal protection, maritime monitoring and surveillance are worth to note. Blue Economy as a philosophical economic movement acknowledges some aspects of popular concept of “green living”, such as using organic food and applying certain forms of renewable energy, can be financially out of reach for significant part of the people in the society. The primary target of the Blue Economy is to establish the examples from nature where organic recycling occurs and stimulates these processes to find out where and how the waste that generated from various anthropogenic sources can be innovatively made useable again.

Blue economy is characterized as appropriate use of marine assets that entirely reduce ecological hazard and enhance human prosperity. It contains all economic exercises related with the seas, ports coastal zones and others ocean-based exercises. It has center commitment in the socio-economy and identified with ocean-borne exchange and business, seas science and such other economic activities. Nationally and universally it helps to the nations which are utilizing marine assets. The point of this economy is to plenitude of shortage in the country. Two-third of the earth land is under the water and Bangladesh is additionally a riverine nation. In this way, blue economy can contribute deeply in the improvement of economic development and social welfare on it.

'Blue Economy' was considered at the RIO + 20 United Nation (UN) Conference on sustainable development, held in Rio de Janeiro, Brazil in June 2012. The sea is the best sources of energy utilization. At present, a large portion of the nations is trying to ensure the most extreme utilization of the sea for the sustainable improvement. As their economy is now becoming Ocean based economy and the ocean is blue that's why the oceanic based economy is called the blue economy.

It is one of the critical factors contributing to the socio-economic development of coastal nations. At present, Bangladesh has picked up a large area in the Bay of Bengal through the settlement of sea debate with India and Myanmar. Presently, Bangladesh can claim to be a nation of blue economy. This sea settlement has preferred Bangladesh with the extension of regional territory and Economic Zone. The geographical zone involves more than 1, 18,813 square kilometers of water including 200 nautical miles over the sizeable range since the settlement of the suit has opened an incomprehensible open door for our nation, the various discussion is going ahead with emphasizing on cultivating the procedures of how using the capability of our new ocean economy. The Bay of Bengal can rise as a profoundly prospective source of the Blue Economy. Bangladesh can take benefits of its ocean-borne assets like oil and gas investigation, fisheries, shipbuilding and shipbreaking, salt collecting, creating tourism and so on.

The world has been racked by food, fuel, natural, economical and money related crises. A blue economy can bargain systematically with these difficulties. It is a unique vision of what is conceivable with regards to the practical economy. The blue economy assumes a vital part for our nation. Since over 70% of our planet is secured by the sea and around 90% of the world's exchange of products is directed via ocean. The fact that our nation has won the large maritime boundary. It has made large scopes to investigate mineral resources from the seabed without obstacles. A great supply of living and non-living assets is available under the seabed and water section. In any case, we have a shortage of skilled labor to determine the availability and investigate the assets. To manufacture skilled labor in these segments, we have found a way to import advanced education on oceanography in Bangladesh.

It's high time that Bangladesh set up to utilize the ocean assets and fitted its labor with learning and innovation to bring success to the country. The rising ocean level and saltiness are two significant difficulties to the seaside populace, and we need to upgrade our ability to secure ourselves in such circumstance. We expect that the blue economy will make another skyline of expectations and desires to transform Bangladesh into a developed nation.

The blue economy concept was perhaps unknown in Bangladesh. But after the settlement of sea limit border question with Myanmar and India discussion started on the blue economy. The general verdict helped Bangladesh setting up sovereign rights over the living and non-living assets of the Bay of Bengal inside 200 nm. Similarly, the decision with India declared on

seventh July 2014. Bangladesh's economy is ocean-borne to a proper extent, and with \$ 130 billion GDP the nation's economy stands the 44th position in the world. Focusing the significance of blue economy, Prime Minister Sheik Hasina (on first September 2014 in the global workshop on the blue economy in Dhaka) said that marine-based economic activities and administration of ocean and its assets through "Blue Economy" could make new skyline for the improvement of a coastal nation like Bangladesh. At present, 90% of the nation's exchange is transported through the ocean. The fisheries and others mineral assets in the Bay of Bengal can contribute enormously to the economy of Bangladesh. Marine fishes are one of the valuable export items of Bangladesh. It is now more appropriate to depend on sea assets and management of sea resources through the blue economy.

The primary objective of this study is to investigate the current scenario of the sea-based economy in Bangladesh. The contribution of this study is that it discusses the other sectors like tourism along with the fishing and aquaculture sectors with recent data.

LITERATURE REVIEW

The concept of the blue economy is new in Bangladesh, not the international border. For this reason, there are not much research works on this concept. But recently, it achieved much attention from researchers around the world. This term was introduced by Gunter Pauli (Pauli, 2010) and later became popular after the United Nations Conference on Sustainable Development held in Rio de Janeiro in 2012 (Smith-Godfrey, 2016). The term 'Blue Economy' does not have any universally accepted definition (Bollmann 2010). However, from the literature, it can be understood that blue economy tries to utilize the oceans and coastal resources in a proper way.

Jiang, Liu, and Su (2014) estimated a multi-factor production function model with a constant elasticity of substitution in the case of China's marine sector. They found that during 2000 to 2011, the contribution of the Chinese marine economy to the country's GDP raised from 6.46% to 13.83%, with an average annual growth rate of 7.17%. Zhang, Dong, Yang, Wang, and Song (2004) suggested some policies to achieve the sustainable development of sea economy in China that include- 1) To make ocean strategies as national strategy, 2) To achieve combined economic growth of sea and land; 3) To develop marine resources by science and technology; 4) Establish suitable legal institution for marine environment; 5) To create new idea of sea defending. On the other hand, Nuryadin, Syaifudin, Handika, Setyobudi, and Udjianto (2016) investigated the contribution of the blue economy in the economy of Indonesia. They found that the marine sector contributes 7.86% to the economy. Further, they recommended that fish assets, maritime industry, marine set-up and marine services are the major sectors that have very possibility for development.

Many researchers also investigated the contribution of tourism to economic development. Tourism industry can positively influence the economic growth, tourists expenditure and thus increase the potential growth in the economy ENREF 1. Ghali (1976) investigated the tourism-led growth hypothesis in the case of Malaysia and Singapore. They found that tourism is the cause for economic growth in Singapore, but economic growth is cause for tourism in Malaysia. Samimi, Sadeghi, and Sadeghi (2011) estimated the relationship between economic growth and tourism industry in the developing countries. They found that tourism is also one of the reasons for economic development in those developing countries. Tugcu (2014) explored the relationship between tourism growth and economic growth in many Asian, African and European countries. They found that European countries are better able to produce income from the tourism sector. There is also other research that did not see the relationship between tourism and economic growth. Ahmed, Allison, and Muir (2010) examined freshwater prawn

farming in Bangladesh they found that the average annual production of prawn, fish, and rice was estimated at 467, 986 and 2,257 kg ha⁻¹, respectively. They also found that large farmers produced higher production because of economies of scale with more inputs. They further found that the larger farm size and the long experience of prawn farming have a positive impact on production. However, there is no specific study conducted in case of Bangladesh that analyzes the contribution of sea resources in the economy from a sustainable development perspective.

METHODOLOGY

This study applied descriptive statistics to present the current scenario of the blue economy in Bangladesh. Graphical inspection is a common and useful technique to observe the trend and behavior of any variable. This study inspects the trends in some variables through graphical examination. The variables used in this study are: 1) Export receipt from fish and prawn in Bangladesh. 2) Export receipt from fish and shrimp of Bangladesh 3) Tourism arrival in Bangladesh.

The secondary data and other information used in this study have been collected from two main sources- 1) The Bangladesh Bank and 2) World Bank.

Blue Economy and Sustainable Development

In simple, the development of blue economy not solely the development of ocean economy. However, property development of the marine economy is also included in the development considerations. Thus, blue economy and property development square measure inter-related. According to the often-cited Bruntland Report issued by the World Commission on Environment and Development (1987), 'Development that meets the wants of the current while not compromising the possibility of future generations to satisfy their own needs' (Keeble,1988).

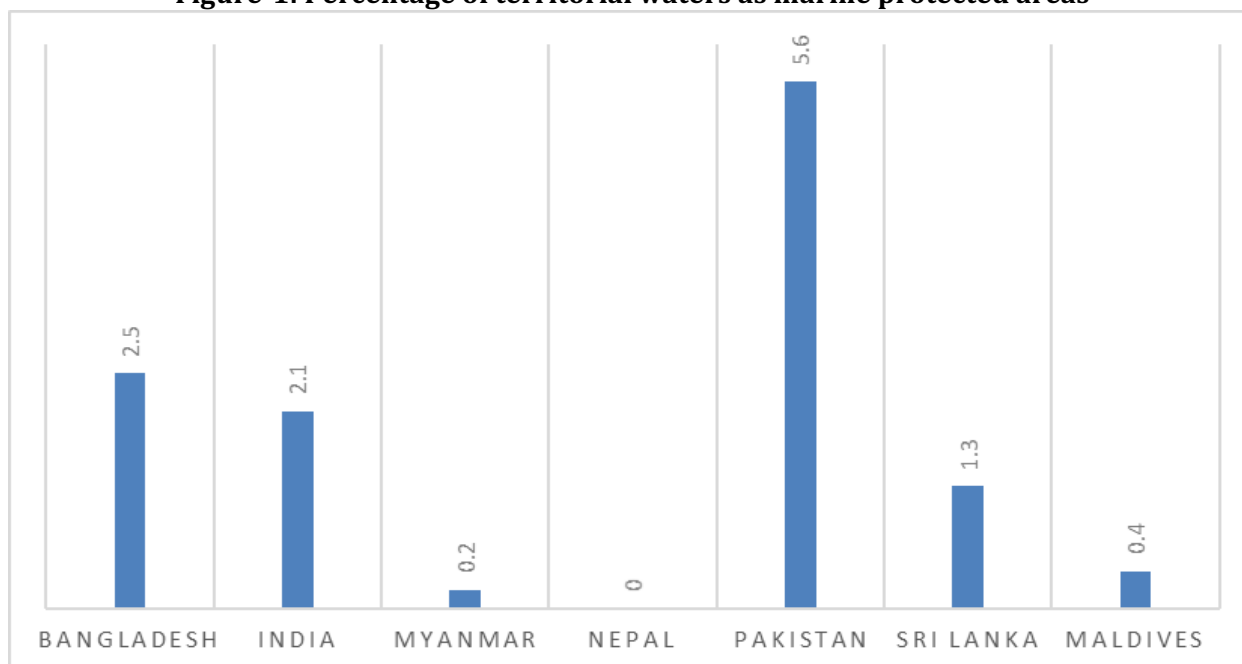
Globally we have a tendency to be even meeting the wants of the current not to mention considering the requirement of future generations. Since, coastal regions and developing Island countries have continued at the front position of this Blue Economy, recognizing that the oceans have a significant role to play in humanity's future. Therefore, we should always take into account Blue Economy within the context of property development and impoverishment wipeout joined of the necessary tool obtainable for achieving property development. There is a tendency to emphasize that, it ought to contribute to removing impoverishment likewise as sustained economic process, improving social inclusion, boost up human welfare and making opportunities for the generation of employment opportunity and tight work for all whereas continuing the strong functioning of the earth's scheme Para fifty six, the long run we would like (UNCHD, 2012).

As per the Article 56 of the United Nations Conventions on the Law of the Sea (UNCLOS), the coastal country (Bangladesh) has authority over the formation and use of artificial islands, installations and constructions; naval scientific research; security and conservation of the marine environment and Article 77 states sovereign rights in the Exclusive Economic Zone (EEZ) for the intention of discovering and exploiting, preserving and managing the natural resources, whether non-living or living, of the waters superjacent to the seabed and its subsoil, and with regard to other deeds for the economic exploration and exploitation of the zone, such as the production of energy from the sea water, currents and winds.

Marine protected areas (% of territorial waters) in South Asia.

Marine protected areas are preserved areas bylaws. Figure-1 shows that Bangladesh has 2.5 percent protected areas out of all territorial water-lands.

Figure-1: Percentage of territorial waters as marine protected areas



Data sources: OECD

Blue- tourism destinations in Bangladesh

Tourism which is one of the sectors of the blue economy in Bangladesh has been recognized as one of the most gainful business and the key to worldwide trades. Bangladesh has an incredible open door and capability of turning into a tourist based country. Tourism industry gives more openings for work when contrasted with different ventures. Tourism business reduces unemployment and helps to earn more foreign exchanges.

Consistently plenty of worldwide travelers visit Bangladesh, and the quantity of visitor are expanding step by step. Without a doubt, Bangladesh gets less global visitor than India and Nepal. However, the circumstance is evolving quick, in light of simple correspondence with the world. The public airplane terminal has an association with critical air terminals of the world. The administration of tourism suppliers is exceptionally proficient at this point. There are a ton of lodgings, motels to suit visitors. Furthermore, now one vital thing is the tourism-related administrations spread to many places similarly to what was inaccessible to remote regions already.

Cox's Bazar: Cox's Bazar (named after British East India Company officer, Captain Hiram Cox 1799) is the first candidate amongst the tourist's destination in Bangladesh. It is a fishing port as well. The sea beach in Cox's Bazar has an unbroken 120 Km sandy sea beach which is considered as one of the longest sea beaches in the world. At present, Cox's Bazar is one of the most-visited tourist destinations in Bangladesh.

St. Martin: This coral island has been the popular attraction of local and foreign tourists in Bangladesh. The majority of its inhabitants live primarily from fishing. One can reach St. martin-island within few hours from Teknaf in a short time. The number of visitors has

increased sharply in recent years. It is considered one of the eco-tourism destination in Bangladesh.

Kuakata: Kuakata is located in Kalapara Upazila, Potuakhali District. It is about 320 kilometers (200 mi) south of Dhaka, the capital, and about 70 kilometers (43 mi) from the district headquarter. Kuakata has an excellent view of the sunrise and sunset from the same white sandy beach in the water of the Bay of Bengal. The long strip of dark, marbled sand stretches for about 18 kilometers (11 mi). This sandy beach has gentle slopes into the Bay of Bengal. Many migratory winter birds are staying in Kuakata. However, because of the poor transport facilities to trip to Kuakata, it has fewer visitors than Cox's Bazar.

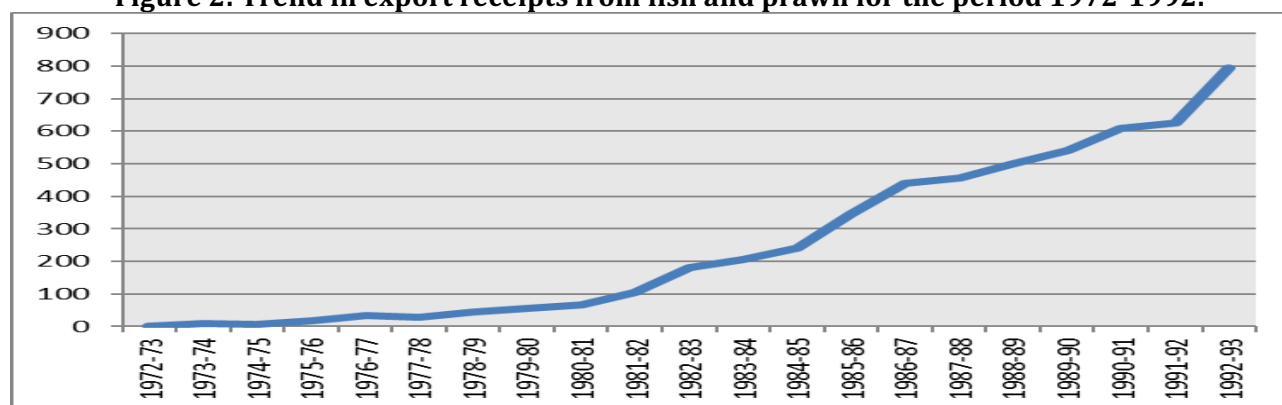
Fish Export from Bangladesh

The Table 1 and figure 2 show that the export receipt from fish and prawn are increasing and on average Bangladesh received 252.95 cores taka between 1972 and 1992. Data are collected from Bangladesh Banks's time series database. However, during 1993-2015 the average receipts are 2615 cores taka. It is clear from figure 4 and figure 5 that, the fish export receipts have upward trends which indicate that Bangladesh is earning more and more from fish exports. However, during 2008-2009 it has declined sharply and then again increased. The deviation from trend might be due to the political unrest and the floods during 1998.

Table 1: Summary statistics for export receipts from fish and prawn during 1972-1992. Source: Bangladesh Bank.

	FISH_EXP Tk. Cores
Mean	252.9524
Median	182.0000
Maximum	794.0000
Minimum	2.000000
Std. Dev.	251.8951
Sum	5312.000
Sum Sq. Dev.	1269023.
Observations	21

Figure 2: Trend in export receipts from fish and prawn for the period 1972-1992.



This following table shows that, the average export receipts from fish and shrimp from (1994-2015) Tk. 2615.500 Cores. The maximum amount received from this sector Tk.4758.000 cores.

Table 2: Summary statistics for export receipts from fish and shrimp during 1994-2015.

	FISH_EXPORTS 1994-2015
Mean	2615.500
Median	2430.000
Maximum	4758.000
Minimum	1013.000
Observations	22

Source: Bangladesh Bank.

In this graph indicates that, export receipts from fish and prawn for the period of 1993-2014. From 1993-2001 the received increased with up-ward sloping. In 2011-2012 the revenue was highest.

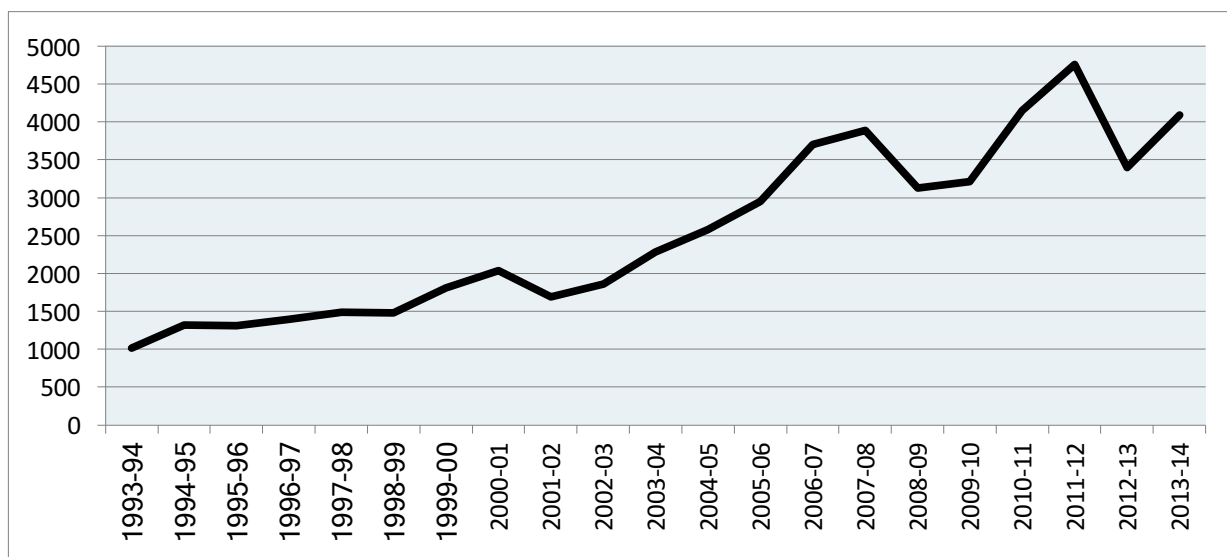
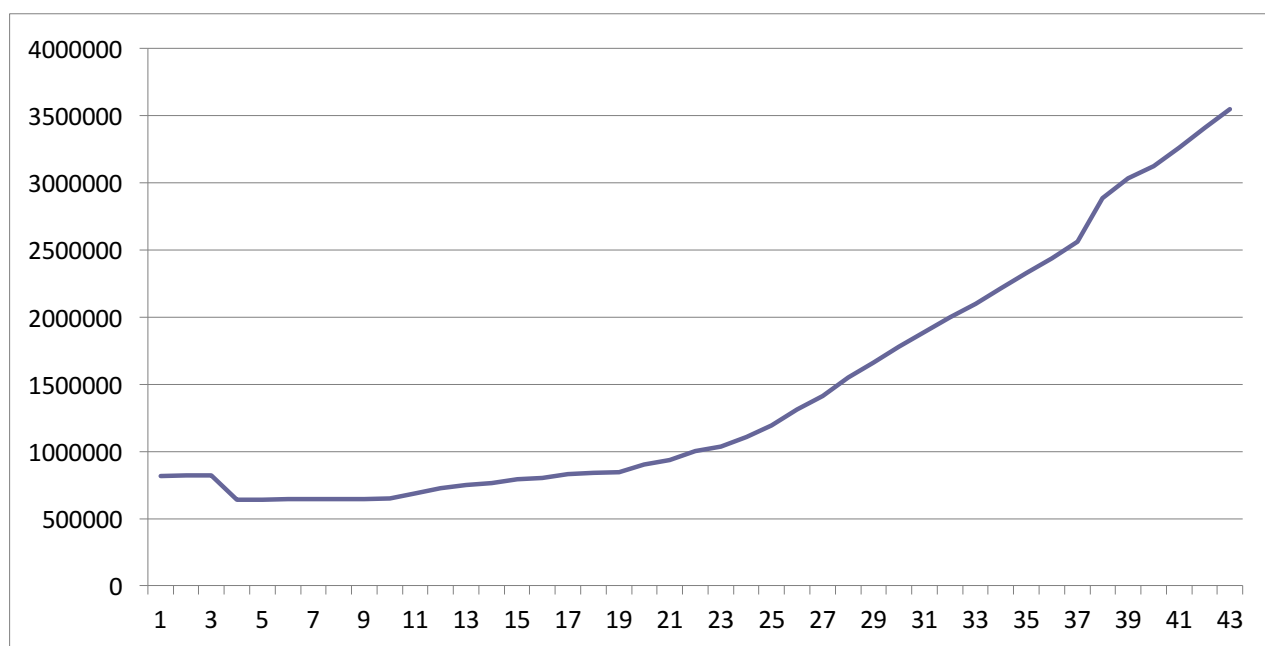


Figure 3: Trend in export receipts from fish and prawn for the period (1993-2014).

Total Fisheries production in Bangladesh 1972-2014

Table 4 shows that in Bangladesh fisheries production from 1972-2014 the maximum output is 3548115 and average production is 1458879.

Items	FISHERIES_GDP
Mean	1458879.
Median	1002567.
Maximum	3548115.
Minimum	640070.0
Std. Dev.	905711.4
Observations	43

Figure 3: Total Fisheries production in Bangladesh 1972-2014 in the metric ton

Opportunities for Blue Economy Expansion in Bangladesh

South Asian countries area uniquely blessed the Bay of Bengal, the most crucial Bay within the world deckled by Bangladesh to the North, India to the west. It has vast potentials for the Blue Economy.

The productive economic sectors of blue economy area unit emphasized and regarded in harnessing the total utilization of ocean-based resources primarily inside the current maritime boundary of Bangladesh. If this ocean mostly based resources area unit managed by correct coming up with and inter-sectoral coordination of public-private partnership and investment, it'll generate a sturdy foundation for earnings and economic advantages below the approach of blue economy. On the opposite hand, if marine primarily based financial resources with potential sectors are managed and ruled by principles of diversity protection, conservation and efforts for care area unit tangled with a vision of scientific understanding, so the blue economy will produce some opportunities to resolve the problems of climate changes at the coastal areas. It would additionally generate jobs and convey concerning tangible changes within the lives and keep off the immeasurable folks living on the outline, in islands, and across Bangladesh. A coordinated approach with involved stakeholder's teams is needed to see the extent to that the constraints mentioned within the discussion section may be changed into opportunities, and to make sure that development of the blue economy doesn't end in unsustainable and damaging practices for the good thing about short-term economic gains over longer terms property economic and social advantages. Specifically, for Bangladesh, this involves developing a maritime/marine spatial coming up with the directive to detail coordination between blue economy sectors and stakeholders to make sure property development.

Potential Blue Economy Sectors of Bangladesh

Shipping: Coastal nations ought to position themselves concerning facilities to catch up for this developing exchange and optimize their advantages. The ship is safest, most secure, additional productive and ecologically stable for modification of any product from one country to a different. Apart from Chittagong and Mongla seaports, there is a high potentiality of establishing deep sea port at Sonadia island of Cox's Bazar.

Fisheries: Fisheries is a significant economic sector in nations with coasts on the Bay of Bengal geographical region, viz. Sri Lanka, India, Bangladesh, Myanmar, Thailand, Malaya, and country. Fish is that the most demandable animal primarily based supermolecule in the food of the overall population in these countries. It is the smallest amount concerned by culture and religions. In light-weight of a current estimate, the combination variety utilized on a full-time basis in fisheries within the space lined by the Bay of the geographical region (BOBP) is one.85 million. Globally 350 million jobs are connected to marine fish, with ninety percent of fishers living in developing countries.

Tourism: Marine and coastal business enterprise are significance to several developing nations. Business enterprise could be a major worldwide industry; in 2012 universal economic crises by four despite the global financial crises and grooved Sep 11 of extensive gross domestic product. In 2012 business enterprise support Sep 11 of world occupations and created 6 June 1944 of the planet export profits.

Energy: In 2009 offshore fields drawn thirty second of overall rock oil production and this project could ascend to thirty-fourth in 2025, as an oversized portion of the retrievable formal oil is evaluated to be in seaward fields-a fourth of that in the problem.

Biotechnology: The worldwide marketplace for biotechnology things and procedures is correct currently calculable at U\$ two.8 billion and grow to develop to around U\$ four.6 billion by 2017. Marine biotech has the potential to deal with a suite of global difficulties, to illustrate, property food provides, human health, energy security, and natural remedy.

Submarine mining: The planet is getting ready for the exploration and exploitation of mineral stores on and beneath the ocean floor. Industry, owing to increasing product worth, is popping its attention to the potential wealth of nodules, cobble and then on. Business profit is substantial in buds.

Harvesting Power Generation: Researchers have recently completed the primary ocean tests of a system that uses an artificial muscle to come up with power from the motion of a float riding up and down on the waves. Though the example produces little electricity, the researchers say that wave forms supported the technology may eventually rival wind turbines in power output that provides a significant supply of fresh energy and will massively contribute profit, an influence hungry nation.

Shipping and port facilities: 80% of the world trade by volume, and over 70% by worth, is carried by the ocean and handled by ports worldwide. For developing countries, these percentages are generally higher. World free trade grew by 4% in 2010 despite the economic recession.

Challenges for Sustainable Development of Blue Economy

The role of marine assets in economic condition reduction, autarchy in food productions, securing natural balance, facing opposite effects of environmental amendment et al. economic potential outcomes area unit unlimited. However with the chances and possible outcomes the difficulties conjointly companion. Future may well be the difficulties:

- ❖ **The absence or severe lack of ‘proper policy’ and ‘marine related peoples/resource persons’ at higher policy levels and similar national organizations/body in relevant ministry/department is a significant drawback for the implementation of many issues related to the capacity development of different marine sectors in Bangladesh.**
- ❖ **We have to be compelled to guarantee our sovereignty over the entire coastal space & maintaining the safety over the commercial coastal area of the Asian nation.**

- ❖ **The authority should be controlled water level rise and alter in system and temperatures, from coral bleaching.**
- ❖ **Lack of knowledge, expert workforce, and technology to take maximum benefits from the blue economy, especially for exploiting deep-sea fishes and seabed resources.**
- ❖ **Lack of cordial combination of visionary political leadership, efficient bureaucracy, investors of real entrepreneurial attitude and innovative development thinkers to succeed in that plan.**
- ❖ **We have no robust master plan which will be focused on the entire coastal belt and targeting extra-regional players.**
- ❖ Establishing marine friendly infrastructure for marine tourism.
- ❖ Keeping up an investment-friendly environment in the specific area.
- ❖ Economical utilization of biodiversity.
- ❖ Safeguarding mangrove and ocean grass.
- ❖ Addressing environmental change and managing carbon discharge.
- ❖ Preventing acidification of waters.
- ❖ Keeping ocean region free from pollution.

CONCLUSION

It can be concluded that Bangladesh needs at this moment to create more awareness and broaden the horizon towards utilizing maritime resources and bring about socio-economic changes in the lives of people of Bangladesh. Waters surround the country from three parts, and it has many rivers. The blue economy can be one of the possible solutions for Bangladesh to achieve sustainable economic growth. This study attempted to present the current scenario of the blue economy in Bangladesh. From the analysis, we found that the sea production and aquaculture production is increasing. It is a good sign. However, frequent floods in Bangladesh are damaging the possibilities of blue sectors. Without having well-trained, skilled and educated human resources in different marine industries, sustainable and dynamic blue economy is not possible for any country. The coastal areas like Cox's Bazar, St. Martin, Kuakata can contribute much to the economic development of Bangladesh if we can use these resources appropriately.

The government should take future policy-framework for the success of the Blue Economy which may focus on structural collaboration; translating research in products, holistic approach to the Blue Economy; and motivating & training young generations.

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Distance Teacher Trainee Perception of Teaching Practice Mentors at the University of Cape Coast, Ghana.

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ABSTRACT

Mentoring as part of teaching practicum has emerged as an effective process through which the professional competencies of trainee-teachers are developed. The practicum experience of teacher training could be pertinent in the context of distance education where the mode of delivery is mainly by print, which do not allow the modelling of acting out ideal examples of teaching. The role of the mentor teacher in the distance education environments of public universities in Ghana therefore becomes critical in quality teacher development. The placement of teacher mentors in school locations for Distance Education trainee teachers during teaching practice helps trainee teachers to model good teaching skills. Trainee teachers are assisted to plan, teach and reflect on their lesson delivery with the view of improving their professional competencies. This paper examines the perception of Distance Education trainee teachers on teacher mentors placed at their school locations during teaching practice. A structured questionnaire was developed to collect data, which was analysed quantitatively using descriptive statistics. The results of the findings based on support for lesson preparation, teaching skills, coaching, teaching experience, and teacher mentors feedback, indicated that more attention could be focused on improving the mentorship of Distance Education trainee teachers at the University of Cape Coast during teaching practice in order to produce quality teachers for the education sector. It was however recommended that strategies to improve and strengthen the mentoring system at the University of Cape Coast, College of Distance Education be planned well to achieve the expected outcomes to the full benefit of trainee teachers.

Keywords: Distance education, Teacher-trainees, Teacher mentor, Mentoring and Teaching Practicum.

INTRODUCTION

Throughout the world, a major component of teacher education and the preparation of teachers is Teaching Practice (TP) (Young & Wright, 2001). In distance learning environments the role of the teacher mentor becomes very critical as trainee teachers' knowledge about teaching is based on theoretical knowledge from their study materials. The critical role played by the teacher mentor for the development of the professional competencies of teacher trainees for the production of quality teachers on Distance Education programmes cannot be overemphasized (Du Plessis 2013; Barry & King, 1998).

The practicum experience that trainee teachers acquire from teacher mentors during teaching practicum could be pertinent in the Distance Education context where the study materials used, do not allow modelling or acting out ideal teaching methods (Harrison & Pell, 2006). Mentoring affords trainee teachers the opportunity to refine their teaching methodologies from theoretical ideas about teaching to real teaching practicum. Being mentored, trainee-teachers can apply the principles of teaching and learning that they studied during the course

of study to practical delivery quality lessons under the guidance of a mentor. This is actually the professional development of trainee teachers on any teacher training programme (Ngoepe, 2014).

Mentoring has emerged as an essential and effective process for professional teacher training. The teaching practicum through the mentoring process in Distance Education environments has been studied by many authors such as Ngoepe (2014), Sedibe (2014), Maphalala (2013), Akuamoah-Boateng, Sam-Tagoe & Brown, (2010), Hudson, (2007) and Smith & Snoek (1996) from different viewpoints. These research studies in literature points to the impact of teaching practicum experience on the education of teachers in the Distance Education environments of higher institutions. For instance, Smith & Snoek (1996) reported that trainee teachers from the Netherlands and Israel saw teaching practicum as the most valuable part of their training for the teaching profession. The purpose of this study therefore, is to examine trainee teachers' perception of teacher mentors placed at their school locations during teaching practicum at the College of Distance Education, University of Cape Coast, Ghana.

At the University of Cape Coast, College of Distance Education, teaching practicum provides Distance Education trainee teachers opportunity to apply theoretical knowledge and skills in teaching into practice. The goal of the mentorship is to enable trainee teachers to plan, deliver and evaluate their teaching methods and skills with the cooperation of their mentors. Teaching practicum enables teacher trainees to understand their roles in the larger environment of the teaching profession through professional competencies development. The role of the teacher mentor is therefore crucial in the trainee teachers' growth and development. Mentor teachers as professional educationists are aware of current educational issues, and they are uniquely placed in the school locations of trainee teachers to help them navigate the demands of the teaching practicum. The knowledge, time, energy and experiences of the teacher mentor that is required to make this experience as a valuable one for the trainee teachers. Teacher mentors are very much appreciated by the university collaboration. The university therefore has to ensure that teacher mentors are very clear about their roles and responsibilities in order to effectively support the trainee teachers on teaching practicum at their various school locations.

At the University of Cape Coast, College of Distance Education, during teaching practicum (3credits) the trainee teacher on teaching practicum has two categories of mentors: a professional academic senior member from the University and a professional mentor from the Ghana Education Service who are placed at school locations of trainee teachers for the purpose of the practicum. Inter personal interaction which appears to be a "deficit" in distance learning environments is a key quality value of the Distance Education trainee teachers during their professional development in the mentorship process. This paper proposes that the College of Distance Education, University of Cape Coast could plan and strategize for the maximum utilization of teacher mentors engaged by the College. This is to reinforce trainee teachers' key values for their professional development in the Distance Education context.

THE CONCEPT OF MENTORING

Mentoring has emerged as an essential and effective process for developing teachers' professional competencies during training. Mentoring is a popular model of teaching practice that enable trainee teachers to enact pedagogical theories using practical realities of the classroom situations. Effective mentoring programmes pair an experienced teacher mentor with a trainee teacher so that the former could provide the latter with regular coaching and feedbacks that are essential for trainee teachers to know areas where they are doing well or where they need improvement (Ngoepe, 2014).

The term mentoring has been defined in various ways by different authors. Tomlinson (1995) defines mentoring as assisting student- teachers to learn how to teach during field experience. This definition suggests that mentoring is undertaken not merely by teachers holding the formal title “mentor” but also by other teachers whose advice and support may be sought or whose teaching and interactions may be witnessed by trainee teachers during the teaching practicum experience. In such teaching practicum exercises, mentors establish a dynamic reciprocal relationship with trainee teachers promoting their career development, reflecting on pedagogical approaches in an effort to improve their professional competencies levels of the mentees (Vonk, 1993).

Mentors, who are sometimes referred to as “supervising teachers” or “cooperating teachers” “lead teachers” or “host teachers” are chosen by the teaching practice units of the teacher education institution (Hudson, 2009). Mavhunga, (2004) opined that Mentoring is sometimes not effective to develop the professional competencies of trainee-teachers and to reflect on their teaching. This is because sometimes mentors are not trained on how to conduct their professional roles and responsibilities during the collaboration for the mentorship.

Historically, a mentor has been used to denote a wise and trusted guide, an adviser or a master teacher. Hobson, Malderez & Tomlinson (2009) define mentoring as a one-on-one support for a novice or less experience practitioner (mentee) by a more experienced professional (mentor). According to Murray (2001), the action is mentoring if the following aspects could be taken into consideration:

- the mentee and the mentor have confidential discussions;
- the focus is on mentees and mentors reciprocal and personal development;
- they meet regularly;
- they deal with practical issues more than theoretical issues in accordance with mentees interest;

In addition to the above-mentioned structuring, generally, mentoring consists of a contract between the mentee and the mentor which is facilitated by the institution. The institution usually becomes a third party in the collaboration. All these aspects of the mentoring processes are realized in the trainee teachers’ practicum processes at the College of Distance Education, University of Cape Coast.

The teacher mentor’s roles and responsibilities on the other hand include supporting the mentees’ psychological well-being and taking the social aspects of the mentoring process into consideration. Kram, (1983) mentions two basic functions of a mentor: career functions and psychosocial functions. Career functions are the aspects of the relationship that primarily enhances career development. While psychosocial function involves the role of modelling, enhancing the sense of competence, clarifying identity and friendship. These basic functions of the mentoring process work well in mentoring relationship in the Distance Education environment. One basic aim of mentoring is that the mentee in the teaching practicum will be able to understand his/her role in the larger scope of the teaching profession and in the extended operational environment of their school locations. This is to enable the mentees to learn how to develop and advance their professional competence levels. It is crucial to recognize that mentoring can have a variety of purposes and goals and can take place at different stages of mentees professional development process.

TEACHING PRACTICUM AT CODE, UCC

In the distance education environment of University of Cape Coast, College of Distance Education, the purpose of teaching practicum is to provide the trainee teachers with the opportunity to apply their pedagogical knowledge and skills into practicum. Trainee-teachers

participate in teaching practicum for a minimum period of two semesters (32 weeks) The first 16 weeks is used for on campus teaching practicum where trainee teachers put into practice the theoretical knowledge acquired through their modules with their course facilitators serving as their mentors. They spend the rest of the time for teaching practicum on off- campus at the school locations of their choice. During the off- campus practicum, trainee teachers observe demonstration lessons taught by the host teacher and performs some professional duties assigned to them by the host teacher. As the trainee teachers observe lessons by their host teachers, they write detailed lesson plans, teach lessons putting into practice the accepted pedagogical strategies mutually agreed upon. The teaching practice unit of CoDE provides trainee- teachers with sample lesson plans which, among other things, highlight the essentials professional aspects of the lesson plan, learners' prior knowledge, outcomes, learner activities, steps for lessons delivery, time management and lesson evaluation and closure. Officially, mentees are expected to teach two lessons mostly in English and Mathematics and sometimes other specialized subjects. Evaluation comments are made by the mentors and other supervisors from the University as part of the mentees professional development process and for grading purposes in the course of their studies. The University appoints mentors and other supervisors to the school locations of trainee teachers to mentor and monitor the teaching practicum exercise.

THEORETICAL FRAMEWORK

At the University of Cape Coast, College of Distance Education, Teaching practicum mentors and supervisors are expected to consider the principles of mentoring an adult learner. The average trainee teacher at CoDE, UCC is about forty years. The distance trainee teachers lead rather typical adult life, by apportioning their time between family, work, and studies. The principles of the adult learning theory andragogy therefore becomes very important in the mentoring processes of trainee teachers as they are predominately adult learners. Andragogy as an adult learning method of teaching and learning thus becomes very critical in the mentoring processes of distance teacher trainees at the College of Distance education, University of Cape Coast.

The theory of andragogy is an adult learning strategy popularized by Malcom Shepherd Knowles (1972). Andragogy recognizes a shift of education from being teacher-led to student-led directed and teacher-guided. Knowles explains that adult learning is driven by five main assumptions: **self-concept, life experiences, readiness to learn, orientation to learning, and motivation**. A sixth assumption is recognized later in his work.

In 1984, Knowles suggested 4 principles that are applied to adult learning:

1. Adult need to be involved in the planning and evaluation of their instruction.
2. Experience (including mistakes) provide the basis for the learning activities.
3. Adult are mostly interested in teaching subjects that have immediate relevance and impact to their job or personal life.
4. Adult learning is problem- centered rather than content-centered (Kearsley, 2010).

Application of Andragogy in Mentorship at Teaching Practicum

1. There is the need to explain to mentees the specific professional expectations.
2. Instructions should be task oriented instead of memorization of theories and concepts.
3. Instructions should take into account the wide range of the different backgrounds of mentees.
4. Since adults are self- directed, instructions should allow mentees to discover learning outcomes for themselves without depending on the teacher mentors. However, mentees should be given guidance and help when they make mistakes

Proper understanding of Knowles's (1972) four principles of Andragogy enables the teacher mentor to better facilitate the mentoring process during the teaching practicum sessions of trainee teachers. The principles could be integrated into the mentorship process for maximum practicum engagement, experience and motivation.

METHODOLOGY

Research Design

A quantitative research design was used to examine the perception of Distance Education trainee teachers' perception about the mentoring that they received during their field experience in teaching practicum in the Distance Education environment of the University of Cape Coast.

Sample

A total population of 200 trainee-teachers on the distance teacher education programme at the College of Distance Education, University of Cape Coast were selected to participate in the study. The random sampling of final year trainee- teachers studying different programmes at the Education Department pursuing diploma (DBE) and post- diploma (PDE) in Education, diploma (DPF) and post diploma(BPF) in Educational Psychology and Foundations of Education constituted the sample. Overall, 50 trainees teachers in each category were chosen for a consistent sample (McMillan & Schumacher, 2010). All these trainee- teachers study English, Mathematics and other specialized subjects at degree and diploma levels which qualifies them to teach at the basic school level of the Ghana Education Service.

Instrument

A structured survey questionnaire was developed and used to elicit trainee-teachers' perception of their mentors' assistance or lack of assistance among other things. The instrument was designed based on literature and consisted of a 21 item closed ended questions. The questions were related to trainee- teachers' experience with lesson preparation and delivery, coaching, lesson evaluation, mentors feedback and counselling, and general professional improvement. The questionnaire was developed by the authors of this study based on their experiences as past Coordinators of the Teaching Practicum Unit of the University of Cape Coast, College of Distance Education and with reference to the literature.

Data Collection

Data was collected using a five- item Likert scale questionnaire (disagree, disagree, neutral, agree, strongly agree) with 21 opinions statements. The questionnaire was piloted in four study centres of one out of the three zones of CoDE, UCC to check for typographical errors and to identify ambiguities. The questionnaire was structured to capture respondents' bio-data and information about their experiences during teaching practicum.

DATA COLLECTION PROCEDURE

The questionnaires were administered to respondents in their study centres by two research assistants. Respondents were briefed about the purpose of the study and how to respond to questionnaire. They were allowed thirty minutes to complete and return the filled questionnaire to the research assistants. The return rate of the questionnaire was 100%.

Data Analysis

Descriptive statistics was applied to analyze the data. The categories strongly agreed to agree and strongly disagree to disagree were used in the discussion for easy interpretation.

RESULTS AND DISCUSSIONS

The results and discussions are done in line with research questions that guided the study. The results are presented as below.

Trainees Teachers views about Mentors Support with Lesson Plans Preparation.

Table 1: Means and Standard Deviation Results on Trainees Teachers Views on Support with Lesson Preparation

Statements	Mean	Std. D
My mentor helped me to plan for the lessons I was asked to teach.	2.26	.985
My mentor helped me to write the learning outcomes for the lessons I taught.	2.10	.876
My mentor helped me to decide on the media that I could use to develop concepts in lessons that I taught.	2.46	.751
The mentor identified some teaching skills for me to implement in a lesson before/during planning.	1.70	.786
The mentor helped to identify some teaching materials.	2.31	.650
Mean of means/SD	2.16	.809
Source: Field Data (2017)		N=200

As way of achieving the purpose of the study, the trainee teachers were made to rate their views about the teaching practicum in relation to support they get from the teacher mentors for the preparation of their lessons. The results shows that overall, the Distance Education trainees teachers do not get enough support from their teacher mentors for their lessons preparation. The overall results (mean=2.16, SD=.809, n=200) gives evidence to this this revelation. Dwelling on the individual items, the results (mean=2.26, SD=.985, n=200) gives evidence to give evidence to the finding that most of the mentors do not help the trainees teachers to plan for the lessons they are asked to teach. The results (mean=2.10, SD=.876, n=200) further shows that teacher mentors do not play major roles in helping the trainee teachers to indicate the expected learning outcomes for the lessons they deliver during the practicum sessions.

In relation to whether the mentors help the trainees teachers to decide on the media that they could use to develop concepts in lessons that they teach, the trainees teachers indicated (mean= 2.46, SD= .751, n=200) that the mentors are not active in that regard. In line with the view that the mentors identified some teaching skills for the trainees teachers to implement in the lesson before/during/after lesson delivery. The results (mean=1.70, SD=.786, n=200) from the respondents gave a strong evidence that the majority of the teacher mentors are adamant to that effect and as such do not effectively help in the implementation of the lessons of plans of trainee teachers. On the issue of Identification of some teaching materials, the results was not different in that most of the trainees teachers (mean=2.31, SD= .650, n=200) gave evidence that their mentors are not effective in terms of helping them to identify effective teaching materials for their lesson delivery.

Trainees Teachers' views on Mentor support for On-Centre Teaching Practice

Table 2: Means and Standard Deviation Results on Trainees Teachers Views on (On-Centre Teaching Practice)

Statements	Mean	Std. D
I was taught how to write a good lesson plan.	2.66	1.05
I am aloud to sit in when others are teaching.	3.48	1.76
The facilitator demonstrated some teaching skills during on centre teaching.	2.96	1.51
The facilitator coached me on how to teach good lessons.	3.00	1.36
The facilitator sat in some of the lessons that I taught.	3.31	.950
My facilitator encouraged me to use group work during the lessons that I taught	3.22	1.06
My mentor teacher allowed me to use any teaching method that I thought was useful to develop concepts in lessons I taught.	3.09	.778
Mean of means/SD	3.10	1.20
Source: Field Data (2017)		N=200

Table 2 gives comprehensive results on teacher trainee's views on (on-centre teaching practice). The results from the table gives evidence to suggest that in terms of on-centre teaching practice Teacher Mentors in the respective study centres are working to expectations and doing their best to assist the mentees. This was evident after the majority of the teacher trainees (mean=3.10, SD=1.20, n=200) agreed to that fact they get adequate support from Teacher Mentors at their respective study centers during on- campus teaching practicum. For instance, on the issues of facilitator coaching the trainees teachers on how to deliver good lessons, most of the trainees teachers (mean=3.00, SD=1.36, n=200) confirmed that they received good coaching that enable them to deliver good lessons during the field experience. The find out whether the Teacher Mentors thoroughly supervise the lessons delivered by Trainee Teachers, the results (mean=3.48, SD=1.76, n=200) gives evidence that most of the Trainees Teachers are of the view that the facilitators are effective in terms of their supervisory roles. The Trainees Teachers further rated the mentors (mean=3.09, SD=.778, n=200) on how they are allowed to use any teaching method that they think useful to develop concepts for the lessons they deliver.

Trainees Teachers' Reflections on the Entire Teaching Practicum Experience

Table 3-Means and Standard Deviation Results on Teacher Trainees views on the Reflections on the Entire Teaching Practicum Experience

Statements	Mean	Std. D
Teaching practice gave me opportunities to experiment with teaching approaches covered theoretically.	3.26	1.85
I gained a lot of knowledge on how to teach during teaching practice.	3.08	1.06
I got a lot of insights on how students learn English and Mathematics during teaching practice.	3.96	.991
All my practice teaching lessons in English and Mathematics are enjoyable.	3.70	1.36
Mean of means/SD	3.50	1.31
Source: Field Data (2017)		N=200

To give more evidence on the results on Trainee Teachers reflections on the entire teaching practicum experience was solicited. The results shows that teaching practicum have significant impact on the teaching experience of the Trainees Teachers generally. The Trainees Teachers (mean=3.26, SD=1.85, n=200) confirmed that teaching practicum had given them the opportunities to experiment with teaching many approaches covered theoretically. That notwithstanding having the opportunity to experiment with these teaching approaches, the Trainees Teachers also affirmed (mean=3.08, SD=1.06, n=200) that the teaching practicum had

helped them gained a lot of Insights about the lesson delivery and the teaching profession as a whole, gaining much insights in the delivery of lessons in English and Mathematics during teaching practicum was also identified by the Trainees Teachers (mean=3.08, SD=1.06, n=200). With respect to the excitement of teaching lessons in English and Mathematics, the results was not different in that the majority of the Trainees Teachers (mean= 3.70, SD=1.36, n=200) indicated that they are excited in delivery lessons in English and Mathematics.

Trainees Teachers views on Mentors Counselling/Feedback.

Table 4: Means and Standard Deviation Results on the Trainees Teachers Views on Mentors Counselling/Feedback.

Statements	Mean	Std. D
My mentor provided me with useful feedback after my teaching.	3.26	1.25
The feedback helped me to improve upon the subsequent lessons that I taught.	3.18	1.76
My mentor gave me useful feedback on my entire teaching techniques.	3.06	1.11
Mean of means/SD	3.16	1.37
Source: Field Data (2017)		N=200

Table 4 gives ample evidence on the Trainee Teachers views of mentors counselling/feedback. The results shows in terms of counselling the Trainees Teachers, give to the mentees. It was revealed that the mentors are up to their task. The results were much evident after the Trainees Teachers' responses produced over all mean of 3.16. In relation to whether the mentor provides useful feedback after my teaching, the results (mean=3.26, SD=1.25, n=200) indicates the mentors are very effective in providing useful feedback for the trainees. The Trainees Techers were consistent in their responses by confirming that the feedback helped them to improve upon the subsequent lessons that they teach (mean=3.18, SD=1.76, n=200).These results eventually leads to the fact that the mentors gave them useful feedback on the trainees' entire teaching techniques (mean=3.06, SD=1.11, n=200).

Trainees Teachers Views about Teacher Education by Distance Education

Table 5: Means and Standard Deviation Results on the Trainees view about Teacher Education by Distance Education.

Statements	Mean	Std. D
The mathematics and English teaching methods covered in the course prepared me well to teach the subject during teaching practice.	3.33	1.15
The study material covered enough content that helped me to teach well during teaching practice.	3.51	1.00
Mean of means/SD	3.42	1.07
Source: Field Data (2017)		N=200

Results on the Views about Trainee Teachers Views about teacher education by distance education are presented in Table 5. The results shows that the Trainees Teachers have the conviction that distance education programme is very comprehensive in that Mathematics and English teaching methods covered in the course materials prepared them well to deliver good lessons in the subjects during teaching the practicum experience. (mean=3.33, SD=1.15, n=200).The results further shows that study materials covered enough content that helped them to teach well during teaching practicum sessions (mean=3.15, SD=1.00, n=200).

Views of the Trainees on the Teaching Subjects

Table 6: Means and Standard Deviation Results on the Trainees view on the Teaching Subjects

Statements	Mean	Std. D
English and Mathematics are the most difficult subjects to teach.	1.26	.885
Mathematics and English involves a lot of preparation for teaching	3.48	.976
The Mathematics content in the classes that I taught were difficult.	2.12	1.23
It is essential that mathematics be taught well in the foundation, intermediate and senior phase.	3.45	1.52
After qualifying as a teacher, I will prefer to teach English and Mathematics to other subjects.	3.61	1.26
Mean of means/SD	2.54	1.17
Source: Field Data (2017)		N=200

On the issue of teaching subjects the Trainees Teachers shared varied views. For example Trainees Teachers responses (mean=1.26, SD=.885, n=200) shows that English and Mathematics are difficult subjects to teach. This was in line with the fact that mathematics content in the classes that they taught were difficult (mean=2.12, SD=1.23, n=200). However, they further indicated that Mathematics and English involves a lot of preparation for teaching (mean=3.48, SD=.976, n=200).

The Trainees Teachers gave a strong evidence to believe that it is essential that mathematics be taught well in the foundation, intermediate and senior phases of the Distance Education programme (mean=3.45, SD=1.52, n=200). Amidst all these responses, the Trainees Teachers confirmed to teach English and Mathematics when they complete their course (mean=3.61, SD=1.26, n=200).

CONCLUSION

Mentoring is regarded as a central strategy in the professional development of trainee teachers at UCC, CoDE. It plays an important role in initiating trainee teachers to the teaching profession. Although the concept of mentorship is generally understood by all mentors currently engaged by CoDE, UCC could enhance the roles and responsibilities of mentors in supporting trainee teachers by offering ongoing workshops and keeping frequent contacts with mentors at their school locations to support their work. Mentors motivation is a surest way to increase commitment to execute the responsibilities very well for the best expected outcomes.

RECOMMENDATIONS

There is the need for UCC, CoDE to invest more time and resources to develop a pool of mentors that will support trainee teachers at their school locations. CoDE also needs to appreciate the fact that becoming a good mentor takes time, as result, ongoing workshops should be organized for mentors regularly with the view to improving their skills. In recognition of the roles and responsibilities mentors assumed, they should be motivated to contribute positively towards the professional development of the trainee teachers on the distance mode. Motivation may be in the form of certificates of recognition, end of year recognition functions. UCC, CoDE should ensure that teacher trainees have a suitable mentor at their school locations.

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Graduate Students Experiences of Learning Community in Relation to Self-Determined Motivation

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ABSTRACT

This study attempted to explore the effect of inter- and intra-personal perceptions and practices of graduate students on their academic motivation from a Self Determination Theory perspective. Students in a large research university were surveyed to determine whether there is any association between their sense of learning community, the need for relatedness, and their reasons to be in graduate school. This study provides evidence to support the importance of the fulfillment of the need to belong in learning community. Differences between international and non-international students represented when they were engaged in their coursework as analyzed by using Ryan and Deci's (2000) Self Determination and Tajfel and Turner's (1979) Social Identity Theory.

Keywords: Self-determination, Social Identity, Learning Community, Graduate Students, International Students

INTRODUCTION

Each year thousands of students apply to graduate programs to boost their human capital, improve their lives, and further their careers. Goplerud (1980) mentioned the effect of adjustment to settling in a new life and developing social relations for graduate students. As they developed good relations with the faculty and peers, their performance was enhanced and stress decreased. New graduate students experience stress due to financial and social changes and to need to adapt to their program. They greatly benefit from peer support, as shown in a study of a peer mentoring system (Bowman & Bowman, 1990). Despite the struggle to achieve balance in their lives, graduate students decide to continue their education even in anticipation of these changes due to their strong motivation to learn. As in all levels of learning, each student comes to class with different types of motivation, and an educator's main concern is how to create a learning environment to support and improve the motivation of students to get the most out of learning. Students' experiences across courses with their peers, teachers, and also with their family have an impact on their motivation and well-being.

It is important to understand how such students perceive their learning environment and what aspects affect their motivation, in order to develop more satisfactory learning environments. Thus, this study aims to see whether their social environments affect adult learners as much as younger students have been reported to be and whether their perceptions affect their motivation and performance in their studies.

Motivation and Self Determination Theory

Motivation has been seen as a key process in various endeavors for decades and has developed several different definitions. Motivation can be considered as the energy and willingness to be involved in the process of knowledge, exploring and playing with information towards an aim. Many theoretical constructs associated with motivation have been developed including attribution, self-efficacy, expectancy-value, achievement goal orientation, and self-

determination theory. This study focuses on constructs from self-determination theory (SDT). Rather than taking a simple dichotomous view, Ryan and Deci (2000) presented a complex view of extrinsic motivation as composed of multiple dimensions, which are amotivation; external, introjected, identified, integrated regulation; and intrinsic motivation. Although intrinsic motivation is focused on the core of the work to be accomplished, extrinsic motivation has types that represent a continuum of autonomy.

Amotivated individuals neither feel any passion for the activity nor do they see any value in it, therefore their practices lack the intention to act (Ryan & Deci, 2000). Ryan and Deci (2008) asserted that external regulation refers to engaging in an activity for utility value or to avoid negative outcomes. In introjected regulation, individuals feel some internal pressure for acting but still do not have the full intention to act (Sungur & Senler, 2010). In the next form, a person with identified regulation is seen as somewhat internally motivated because the individual values the behavior or action, due to its personal importance (Ryan & Deci, 2008; Reeve, 2009). The last form of extrinsic motivation involves integrated regulation in which a person has internalized the values and behaviors (Deci et al., 1991). The individual is involved in the activity with self-determination because the activity is important and, valuable personally; however enjoyment is not necessarily felt. There is a fine line between integrated regulation and intrinsic motivation. The intrinsically motivated person is involved in the activity for the pure pleasure of it and is thoroughly interested in the action for self-satisfaction rather than for any external outcome or utility value. Intrinsically motivated individuals do not consider work as a hassle; they can focus on it for a longer period, and approach it with creativity (Reeve, 2009).

Vallerand et al. (1992) proposed that having different levels of intrinsic motivation would reflect reality of humans better than simply thinking of intrinsic motivation as being either on or off. Vallerand et al. (1992) described *intrinsic motivation to know* as the pure joy of learning. Intrinsic motivation to know focuses on the learning outcome while *intrinsic motivation towards accomplishment* focuses on the pleasure one feels when achieving a goal. *Intrinsic motivation to experience stimulation* involves doing an activity for experiencing the stimulating feelings that happen during participation. According to Ryan and Deci (2000), one sub theory of Self Determination Theory, "Organismic Integration Theory", considers that three basic needs humans have are autonomy, relatedness, and competence. *Autonomy* refers to the need to have freedom of choice, to self-determine one's actions without external pressure; *relatedness* is the need to connect with others and belong; *competence* is the need to feel qualified enough to meet one's challenges and to be effective. Recently, Beachboard et al. (2011) found that the satisfaction of the need for relatedness with peers and faculty positively affected intrinsic motivation among college students. Woodruff and Schallert (2008) claimed that before an action takes place, an individual's motivation changes first, reflecting how competent, related, and autonomous the individual feels. In their study on the motivational and experiential dynamics of psychological needs of college students, Sheldon and Schuler (2011) found that participants' experiences were directly related with their needs, such that students who felt a lack of connection strove for more friendships whereas those with higher needs for success strove for competence. When students feel connected to classmates and the instructor of a class, such a feeling can allow students to initiate and accept new experiences and challenges because they feel support and care for the difficulties they may encounter (Noddings, 2005). Having good relations with peers and instructors makes it easier to feel more comfortable, to move out of their comfort zone, and get challenged (Noddings, 2005). By contrast, feeling incompetent directly affects the internalization of behaviors and relatedness to others (Ryan & Deci, 2002). College students in competitive, supportive learning

environments perceive themselves more positively, more confident, and are intrinsically motivated (Faye & Sharpe, 2008).

In sum, fulfillment of the three basic needs, competence, autonomy and relatedness, enhances performance and well-being, resulting in a better process and outcomes.

Sense of Community and Social Identity

In learning environments, a community exists through interpersonal relationships (Osterman, 2000). The interaction and shared practices of members of a community generate an emotional interconnection, a *sense of community*. A strong sense of community requires individuals to be responsible to each other, care about each member of the group, be able to trust one another, feel a sense of interdependency, have common goals to be achieved, common needs to be fulfilled, and develop a strong, sensible communication and empathy (Rovai & Lucking, 2003). As expected, it was found to be one of the necessary components of schools, and led to improved academic success (Solomon et al., 1996). When a positive classroom community is established, students develop friendships, peers and the instructor value their ideas, and they feel pleasure from being in that learning environment and the learning itself (Tinto, 1993). There is also a strong positive connection among sense of belongingness and student engagement, higher intrinsic motivation, and higher competency values (Osterman, 2000). Each learning community includes several groups based on common interests, or characteristics.

By becoming involved in a social group, we define ourselves as part of that group, as ingroup. Social Identity Theory addresses how individuals identify themselves as a member of one group (ingroup), distinguished from others in another group (outgroup), the process of identification, and the outcomes they bring (Turner et al., 1987). It elucidates the process of group formation, identity differentiation, social comparison, and conflict (Tajfel & Turner, 1979). Amiot and Sansfacon (2011) explored the self-determined motives that are associated with identifying with an ingroup, and the consequences of such identification. They found that self-determined motivations to identify with a group had a positive effect on well-being of group members, but intrinsic motivation and amotivation brought more negative consequences. Individuals with amotivation to identify with a group were even explained as possibly experiencing dis-identification, "being outside of the self."

People perceive the community/group they choose to be involved with better than other groups and see their competence as related to being a part of that ingroup (Ryan & Deci, 2003). Amiot and Sansfacon (2011) explained the consequences of identification with an ingroup by integrating self-determined motivation and social identity. They found that self-determined identification in a social group brings positive outcomes. Laar, Derks, Ellemers, and Bleeker (2010) argued that valuing social identities actually protects societal outcomes, increasing well-being, motivation, and performance in low-status groups. In a classroom context, ingroup and outgroup differences would be considered based on the experiences of fellow graduate students and class observations. Non-European and non-native English-speaking international students are likely to experience negative feelings such as feeling outsiders, so they may identify themselves more with their home country or with other international students (Schmitt, Spears & Branscombe, 2003). Schmitt et al. (2003) found that when non-international students chose to identify with international students, discrimination negatively affected their self-esteem and psychological well-being. Most research has shown ingroup and outgroup context effects on ethnic minorities and in relatively younger students from different perspectives. However, not much research has been done with graduate students, perhaps

because of the commonly held high expectations about graduate students who are seen as emerging professionals.

Purpose

This study set out to describe the personal interactions of graduate students within their academic social environment to explain their motivational experiences. Learning environments always provide a dynamic structure with each new group of students. Graduate classes often present a blend of various cultural and academic backgrounds. In this dynamic structure, I focused on the self and environment factors while taking a component of Self Determination Theory (SDT), feeling of relatedness, into consideration.

Hegarty (2011) stressed the lack of research and measurement about the experiences of graduate students and asserted the need to investigate adult learners further. This study reviews the current literature surrounding classroom experiences and sense of community, and the construct of self-determination theory, as well as test the applications of the theories by examining data related to the effect of intergroup relations on the academic motivation of graduate students.

METHOD

Participants

From various disciplines of a large research university, 248 graduate students (89 male, 121 female, 38 gender unknown) participated in this study. List-wise deletion was used for missing data. Demographics are reported in Table 1 for the participants who provided all responses.

Table 1 Demographics

	N	%
Gender		
Male	89	35.9
Female	121	48.8
Missing	38	15.3
Total	248	100.0
Age		
19-23	15	6.0
24-29	100	40.3
30-35	51	20.6
36-42	25	10.1
43-more	19	7.7
Missing	38	15.3
Total	248	100.0
Status		
International	45	18.1
Not-international	165	66.5
Missing	38	15.3
Total	248	100.0
Discipline		
Business	27	10.9
Communication	39	15.7
Education	22	8.9
Engineering	25	10.1
Liberal Arts	55	22.2
Natural Sciences	35	14.1
other	7	2.8
Missing	38	15.3
Total	248	100.0
Ethnicity		
Native-American(Indigenous)	2	.8
Asian-American/Oriental/Pacific Islander	4	1.6
Asian	19	7.7
Black/African-American/African descent	5	2.0
Mexican-American/Chicano/Latino	10	4.0
Puerto-Rican	1	.4
Hispanic/Latino descent	5	2.0
White-European descent	133	53.6
White-Middle eastern descent	13	5.2
Multiple ethnic groups	16	6.5
Other	2	.8
Missing	38	15.3
Total	210	100.0

Measures

The survey consisted of two research instruments and some demographic questions which is detailed below:

The Learning Community Scale: This instrument was composed of items from three different scales, the Basic Needs Satisfaction in Your College Course, the Sense of Classroom Community, and the Academic Classroom Community Scales created by Bush et al. (2004), Bush (2006), Summers et al. (2005). The Cronbach alpha values of the original scales ranged from .66 to .92, with the majority items having good level of internal consistency. In addition to adjusting these scales to the purpose of the study, four items were added. Each item was rated on a 7-point likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The distributed version of the total instrument contained 34 items; however after factor analysis, 28 items remained for data analysis.

Academic Motivation Scale (AMS-C): This scale was originally developed by Vallerand et al. (1992), and consists of 28 items aiming to measure what type of motivation students are experiencing throughout their learning experiences. Vallerand identified 7 categories of motivation which underlie the well-known intrinsic, extrinsic, and amotivation, with a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). In this study, the scale was changed to 1 (not true of me at all) to 7 (exactly true of me). In the scale, intrinsic motivation is divided into “to know, to accomplish things, to experience stimulation,” extrinsic motivation is divided into “external, introjected, identified regulation,” with amotivation its own category. Because the original scale was developed for college students, minor changes were completed to fit the sample of graduate students. The original scale had an internal consistency of .81, test-retest correlation ranging from .71 to .83, indicating that the scale is reliable and valid (Vallerand et al., 1992).

Statistical Analyses

Initially factor analysis was conducted on the Learning Community Questionnaire for defining which items worked best for the participants, and which ones composed clusters. Next, the average scores for each factor were calculated for further analysis. Independent samples t-test was used to compare the means of groups and check whether there were any difference between groups on any factor.

For the Academic Motivation survey, the average scores for each of the seven motivation types were calculated per student. Then, t-tests were run using SPSS to check for differences between, men and women, and between international and non-international students.

After the factor analysis, reliability analyses were calculated for both scales. Then, bivariate correlation analyses were conducted with SPSS between the two questionnaires to determine the kinds of relations that existed within and between subscale scores. Lastly, analyses on each of the variables were conducted for a number of the demographic factors captured in the questionnaire. For two categorical demographic variables (e.g. gender, international status), t-tests and for demographic variables with more than two categories (e.g. age, discipline) one-way Anova were conducted to determine if there were significant differences among the subsamples. For each of the ANOVA calculations, a test for homogeneity of variance was conducted and is reported along with each of the ANOVA outcomes. Additionally Tukey’s post-hoc procedure was used to see which means were significantly different from the other.

RESULTS

Findings were presented beginning with the factor analysis of the Learning Community Questionnaire, followed by reliabilities for both scales in the survey. Then, the findings are addressed as related to each research question.

Factor Analysis for Learning Community Questionnaire

Initially questionnaire consisted of 34 items of which 4 items (17, 19, 20, and 21) were self-created and other items were taken from different scales intending to measure the idea of learning community. Therefore, to select the best fitting items for analysis and to make interpretation of results clearer, an exploratory factor analysis is conducted with principal components and varimax rotation analysis with a .40 absolute value cut point. KMO value of 0.90 and a significant Barlett’s Test of Sphericity proved that the data were suitable for factor analysis. With confidence in the results of KMO and Barlett’s Test (Table 2), a three-component solution is used until reaching the final factors. As a result, Learning Community Questionnaire was composed of 28 items in which “Factor 1-Classroom Community” had 13 items. Items with negative loadings (26, 31, and 32) were reverse scored for next analyses. “Factor 2-Positive

Support and Respect” had 9 items, and “Factor 3-Feeling Distressed” had 6 items. All items in the last factor had negative meanings, with positive factor loadings therefore, instead of using reverse coding, factor 3 is given a negative name; “feeling distressed by situations or others.”

Table 2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.900
Bartlett's Test of Sphericity	Approx. Chi-Square	3696.084
	df	378
	Sig.	.000

Table 3 Factor Loadings for Learning Community Questionnaire

	Component		
	Classroom Community	Positive Support & Respect	Feeling Distressed by others/situations
31. In most of my classes, there are not many people that I am close to.	-.808		
27. I consider the people I regularly interact with in most of my classes to be my friends.	.791		
16. I know other people well in most of my classes.	.768		
29. People in most of my classes care about me.	.752		
18. In most of my classes, I feel connected to the other students and the teacher.	.732		
22. In most of my classes, I really like the people I interact with.	.720		
1. In most of my classes, I make friends with and get to know others in the class.	.717		
26. I pretty much keep to myself and don't have a lot of social contacts in most of my classes.	-.697		
34. Other students in my classes are generally pretty friendly towards me.	.694		
15. In most of my classes, I feel I fit in.	.691		
6. In most of my classes, the other students in class make me feel welcome.	.687		
25. I get along with people I come into contact with in most of my classes.	.674		
32. The people I interact with regularly in my courses do not seem to like me much.	-.634		
10. In most of my classes, interactions with my instructors are generally positive.		.792	
2. In most of my classes I feel as though my instructor respect each student.		.788	
7. In most of my classes, the relationship between the instructor and students is comfortable.		.755	
13. In most of my classes, the instructor supports students' comments.		.732	
3. In most of my classes, students' value other's opinions.		.672	
5. In most of my classes, the instructor gives me positive feedback when I make a comment in class.		.663	
9. In most of my classes, I respect my classmates.		.562	
28. I have been able to learn interesting new skills in most of my classes recently.		.455	
12. In most of my classes, I value each student's contribution to the class.		.432	
23. Often, I do not feel very competent in many of my classes.			.714
33. I do not feel very capable in most of my classes.			.702
20. In small group discussions, I feel uncomfortable being in the same group with unfamiliar students.			.657
19. I avoid asking questions if most of the people in a course are unfamiliar to me.			.618

30. In most of my classes I do not get much of a chance to show how capable I am.			.517
21. I feel uncomfortable when the instructor or other students mention a topic or example that I don't understand because it is culturally unfamiliar to me.			.506

Correlation Analyses of Survey Measures

Internal consistency calculations were conducted for both scales. Based on the reliability calculations using 248 participants responses, the learning community scale had most of the subscales performing very well, with coefficient alphas equal to or larger than 0.70. An overall reliability analysis with 28 items resulted in a Cronbach's α value of .81 representing a highly reliable scale. Reliability analysis of the Academic Motivation Scale was high ($\alpha = .81$), with intrinsic motivation subscales being around .85 alpha levels. Extrinsic motivation-identified at $\alpha = .72$ and external regulation at $\alpha = .77$ showed acceptable internal consistency and introjected external motivation and amotivation subscales had good reliability levels, having $\alpha = .85$ or more.

Findings as related to each research question

1. Will graduate students' self-determined motivation be associated with the nature of their perceptions of the interactions they have with classmates and the instructor in class?

Students' interactions with their classmates and instructors were measured by the subscales measuring Learning Community, with its three factors of Classroom Community, Positive Support And Respect, And Feeling Distressed (factors 1, 2, and 3). Bivariate correlation analyses were conducted on all of the instruments. The results of the Pearson correlation analyses are presented in Table 4.

Table 4 Intercorrelations among Questionnaire-1 and Questionnaire-2 subscales

	Factor 1- Classroom Community	Factor 2- Positive Support	Factor3- Feeling Distressed	Intrinsic M. To know	Intrinsic M. Toward accomplishment	Intrinsic M. Experience Stimulation	Extrinsic M. Identified Regulation	Extrinsic M. Introjected Regulation	Extrinsic M. External Reg.	Amotivation
Factor 1-Classroom Community	1									
Factor 2- Positive Support	.456**	1								
Factor 3-Feeling Distressed	-.337**	-.209**	1							
Intrinsic M.-to know	.092**	.208**	-.170*	1						
Intrinsic M.-toward accomplishment	.090	.172*	-.037	.736**	1					
Intrinsic M.-experience stimulation	.065	.066	.017	.645**	.654**	1				
Extrinsic M.-Identified Regulation	.183**	.237**	.101	.133	.138*	.076	1			
Extrinsic M.-Introjected Regulation	.032	-.006	.206**	.285**	.503**	.338**	.229**	1		
Extrinsic M.-External Regulation	-.018	.000	.307**	-.176*	-.102	-.072	-.514**	.313**	1	
Amotivation	-.224**	-.326**	.262**	-.272**	-.235**	-.047	-.213**	.074	.095	1

* Correlation is significant at the .05 level (2-tailed).

** Correlation is significant at the .01 level (2-tailed).

The results showed that the *classroom community subscale* was positively correlated with the *intrinsic motivation to know* ($r=.092, p<.01$), *identified regulation subscale* ($r=.183, p<.01$), whereas it had a significant negative correlation with the *amotivation subscale* ($r= -.224, p<.01$). Positive support and respect from peers and instructors was significantly correlated with the two intrinsic motivation subscales, *to know* ($r=.208, p<.01$), and *to experience stimulation* ($r=.172, p<.05$), and with the extrinsic motivation-*identified regulation subscale* ($r=.237, p<.01$), and it was negatively associated with *amotivation* ($r= -.326, p<.01$). The subscale, *feeling distressed by others or situations*, showed significant positive correlations with two extrinsic motivation subscales, *introjected* ($r=.206, p<.01$) and *external regulation* ($r=.307, p<.01$), and with the *amotivation subscale* ($r=.262, p<.01$), and it had a significant negative correlation with *intrinsic motivation- to know subscale* ($r= -.170, p<.05$).

2. Will international students be more affected than non-international students by the use of culturally local examples or experiences used by the instructor or other students in instruction?

The overall results indicated significant differences between international students and non-international students on the extrinsic motivation-external regulation subscale ($t= -2.018, F=.214, p<.05$) and the classroom community subscales ($t= -3.45, F=3.265, p<.01$). International students mean scores were slightly higher than non-internationals on the intrinsic motivation types and lower on the classroom community subscale. However, one specific item on the surveys addressed the research question pointedly: “I feel uncomfortable

when the instructor or other students mention a topic or example that I don't understand because it is culturally unfamiliar to me". On that specific item, international students scored significantly higher than non-international students ($t=4.40$, $F=9.39$, $p<.01$), indicating that international students feel more uncomfortable than others when the instructor or peers use culturally local examples.

International students reported significantly lower levels of external regulation and lower levels of classroom community than non-international students. No significant differences existed between international status on any of the remaining measures. The means are presented at Table 5.

Table 5 Survey Outcomes for Means by Internationals and Non-internationals

	International	Non-international
	N=45	N=165
Factor1_classroom community**	4.72	5.27
Factor2_positive support & respect	5.71	5.74
Factor3_feeling distressed	3.08	2.82
Intrinsic M.-to know	6.03	5.88
Intrinsic M.-toward accomplishment	5.45	5.17
Intrinsic M-experience stimulation	4.98	4.54
Extrinsic M-identified regulation	5.31	5.53
Extrinsic M-introjected regulation	4.15	4.49
Extrinsic M-external regulation*	3.97	4.44
Amotivation	1.62	1.87

3. Are higher levels of feeling ingroup during a class associated with higher scores on the intrinsic motivation scales and with lower scores on the extrinsic motivation and amotivation subscales?

The mean scores on the subscales of classroom community and positive support is used as an indicator of feelings of ingroup. Students who scored higher on these two subscales were expected to report higher feelings of ingroup in the learning environment. The subscale for feeling distressed by others or situations was defined as feeling outgroup. The Survey Outcomes for Means by Ingroup/Outgroup were presented at Table 6.

The results revealed a positive association between feeling ingroup and experiencing higher levels of intrinsic motivation to know ($r=.158$, $p<.05$), towards accomplishment ($r=.141$, $p<.05$), and identified regulation ($r=.23$, $p<.01$). Feeling outgroup was associated positively with introjected regulation ($r=.21$, $p<.01$) and external regulation ($r=.31$, $p<.01$), and negatively with intrinsic motivation to know ($r=-.170$, $p<.05$).

Table 6 Survey Outcomes for Means by Ingroup/Outgroup

Descriptive Statistics			
	Mean	Std. Deviation	N
Feeling Ingroup	5.43	.72	248
Feeling Outgroup	2.92	.93	248
Intrinsic motivation to know	5.90	.91	214
Intrinsic motivation towards accomplishment	5.21	1.20	214
Intrinsic motivation to experience stimulation	4.63	1.40	214
Extrinsic M.-Identified Regulation	5.49	1.08	214
Extrinsic M.-Introjected Regulation	4.40	1.54	214
Extrinsic M.-External Regulation	4.35	1.40	214

4. Are there any differences on the learning community and self-determined motivation subscales between groups representing gender, age levels, disciplines, ethnicity, and years spent in graduate school?

t-test for gender: Significant differences ($df= 208$) did not exist between men and women on any the subscales of the Learning Community Questionnaire, for classroom community ($t=.195$, $p>.05$), positive support and respect ($t=1.00$, $p>.05$), and feeling distressed ($t= -1.47$, $p>.05$). Also, no significant differences existed between men and women on subscales of Academic Motivation Questionnaire (intrinsic motivation, extrinsic, amotivation). The Survey Outcomes for Means by Gender are presented at Table 7.

Table 7 Survey Outcomes for Means by Gender

	Male	Female
	N=89	N=121
Factor 1-classroom community	5.17	5.14
Factor 2-positive support & respect	5.78	5.69
Factor 3-feeling distressed	2.77	2.95
Intrinsic M-to know	5.94	5.90
Intrinsic M-toward accomplishment	5.20	5.25
Intrinsic M-experience stimulation	4.55	4.70
Extrinsic M-identified regulation	5.49	5.48
Extrinsic M-introjected regulation	4.35	4.33
Extrinsic M-external regulation	4.35	4.33
Amotivation	1.75	1.87

One-way Anova for age: The majority of the participants ($n=100$) were between ages 24 to 29 years, followed by 30-35 years ($n=51$). Significant differences ($df 4, 205$) existed for age on the Factor2-positive support and respect ($F=2.953$, $p<.05$), Factor3-feeling distressed ($F=2.529$, $p<.05$), and amotivation ($F=3.807$, $p<.01$) subscales. No significant differences existed among age groups on the remaining measures. The test of homogeneity of variances was significant only for the amotivation subscale. Results of the mean scores for all measures are found in Table 8.

To see among which pairs the significant differences lay, a Tukey’s Post-Hoc procedure was conducted. On the amotivation subscale, the age group 19 to 23 years was significantly higher

than the 30 to 35 years and 43 years or more groups ($p < .05$). On factor2-positive support and respect, the 19-23 age group scored significantly lower than the 43-more age group and the 24-29 age group scored significantly higher than 43 or more years individuals ($p < .05$). On factor3-feeling distressed subscale, the age group 19-23 years scored significantly higher than 43-more age group.

Table 8 Survey Outcomes for Means by Age

	19-23 N=15	24-29 N=100	30-35 N=51	36-42 N=25	43&more N=19	Total N=210
Factor1-Classroom Community	5.16	5.12	5.17	5.00	5.43	5.15
Factor2-Positive Support and Respect *	5.48	5.65	5.78	5.80	6.13	5.73
Factor3-Feeling Distressed *	3.43	2.91	2.82	2.80	2.47	2.87
Intrinsic M.- to know	6.03	5.84	5.96	5.99	5.93	5.91
Intrinsic M.- towards Accomplishment	5.17	5.24	5.24	5.24	5.14	5.22
Intrinsic M.- experience Stimulation	4.60	4.53	4.82	4.78	4.57	4.63
Extrinsic M.- identified regulation	5.27	5.44	5.70	5.52	5.26	5.48
Extrinsic M.- introjected regulation	4.47	4.49	4.28	4.86	3.82	4.42
Extrinsic M.- external Regulation	4.57	4.37	4.47	4.43	3.54	4.34
Amotivation **	2.50	1.93	1.58	1.83	1.32	1.82

* $p < .05$; ** $p < .01$

Independent Samples t-test for ethnicity: On this analysis the Classroom Community subscale showed significant mean differences between the two groups ($t = -2.379$, $F = .611$, $p < .05$). European decent white students reported significantly higher levels of classroom community than non-European descent students (Table 9).

Table 9 Survey Outcomes for Means by Ethnicity

	Non-European descent N=77	White-European descent N=133
Factor1_classroom community*	4.94	5.27
Factor2_positive support & respect	5.75	5.72
Factor3_feeling distressed	3.00	2.80
Intrinsic M.-to know	5.81	5.97
Intrinsic M.-toward accomplishment	5.29	5.19
Intrinsic M.-experience stimulation	4.62	4.64
Extrinsic M.-identified regulation	5.47	5.49
Extrinsic M.-introjected regulation	4.35	4.46
Extrinsic M.-external regulation	4.44	4.28
Amotivation	1.90	1.76

* $p < .05$; ** $p < .01$

One-way Anova for discipline: Significant differences ($df 6, 203$) existed among disciplines on the Intrinsic Motivation-towards accomplishment ($F = 2.402$, $p < .05$) and to experience stimulation ($F = 3.226$, $p < .01$), Extrinsic Motivation-identified regulation ($F = 2.696$, $p < .05$) subscales. No significant differences existed among disciplines on the remaining measures. The

test of homogeneity of variances was significant for intrinsic motivation-toward accomplishment and extrinsic motivation-identified regulation, external regulation and factor 1-classroom community subscales. Results of the mean scores for all measures are found in Table 10.

Although the ANOVA result indicated a significant overall F for the subscale, Tukey HSD posthoc procedure did not present any significant differences for intrinsic motivation- towards accomplishment subscale. Education majors were significantly higher on the intrinsic motivation to experience stimulation subscale than natural science majors ($p<.05$), and natural science majors were significantly lower on that scale than liberal arts majors. On the extrinsic motivation-identified regulation subscale, education majors had significantly higher mean scores than engineering majors ($p<.05$), whereas engineering majors scored significantly lower than natural science majors on that subscale.

Table 10 Survey Outcomes for Means by Discipline

	Business N=27	Communication N=39	Education N=22	Engineering N=25	Liberal Arts N=55	Natural Sciences N=35
Factor1-Classroom Community	5.21	5.00	5.05	4.96	5.29	5.32
Factor2-Positive Support and Respect	5.65	5.78	5.96	5.62	5.64	5.79
Factor3-Feeling Distressed	2.76	2.67	3.20	3.01	2.85	2.92
Intrinsic M.- to know	5.69	5.94	6.13	5.78	6.13	5.70
Intrinsic M.- towards Accomplishment	4.75	5.00	5.73	5.33	5.51	5.08
Intrinsic M.- experience Stimulation*	4.40	4.43	5.16*	4.41	5.12*	4.06*
Extrinsic M.- identified regulation*	5.42	5.39	6.00*	5.02*	5.45	5.81*
Extrinsic M.-introjected Regulation	3.74	4.33	4.90	4.39	4.43	4.71
Extrinsic M.- external Regulation	4.44	4.17	4.51	4.14	4.38	4.64
Amotivation	1.78	1.94	1.60	1.60	1.99	1.76

* $p<.05$; ** $p<.01$

One-way Anova for number of years in graduate school: Significant differences (df 4, 205) existed among groups of students with different years in graduate school on the Factor2-positive support and respect ($F=4.95$, $p<.01$), Extrinsic Motivation-introjected regulation ($F=2.60$, $p<.05$), and Extrinsic Motivation-external regulation ($F=2.596$, $p<.05$) subscales. No significant differences existed among number of years in graduate school on the remaining measures. The test of homogeneity of variances was not significant for any of the scales. Results of the mean scores for all measures are presented in Table 11.

The Tukey's HSD results showed that graduate students in their first, second, and fifth year or more were significantly higher on the positive support subscale than were fourth year students ($p<.05$), with first year students having the highest mean score (5.89). Post-hoc test results did not give any significant differences among the groups formed by number of years in graduate

school on introjected regulation and external regulation subscales even though the overall ANOVAs had indicated significant results.

Table 11 Survey Outcomes for Means by Years in Graduate School

	1 N=69	2 N=57	3 N=33	4 N=20	5 or more N=31	Total N=210
Factor1-Classroom Community	5.36	5.05	4.97	4.76	5.29	5.15
Factor2_Positive Support and Respect **	5.89	5.74	5.70	5.17	5.73	5.73
Factor3_Feeling Distressed	3.10	2.79	2.84	2.85	2.58	2.87
intrinsic1_to know	5.76	6.13	5.93	5.57	6.06	5.91
intrinsic2_towards Accomplishment	5.12	5.46	5.22	4.71	5.35	5.23
intrinsic3_experience Stimulation	4.48	4.82	4.66	4.64	4.64	4.64
extrinsic1_identified	5.69	5.45	5.26	4.99	5.64	5.48
extrinsic2_introjected *	4.44	4.75	3.96	3.75	4.68	4.42
extrinsic3_external Regulation *	4.65	4.41	3.88	3.77	4.35	4.34
Amotivation	1.67	1.76	2.11	2.23	1.68	1.82

DISCUSSION

1. Will graduate students' self-determined motivation be associated with the nature of their perceptions of interactions they have with classmates and the instructor in class?

The results of the bi-variate correlation analysis showed that students' positive sense of classroom community was associated with intrinsic motivation to know and identified regulation, and was negatively associated with amotivation supporting the hypothesis. Positive support and respect from peers and instructors were related to students' intrinsic motivation to know and to experience stimulation and to their identified regulation (extrinsic motivation), whereas again lack of positive support and respect were related to amotivation. Positive communication, support, respect, and being prepared before class were seen as some major prerequisites to form classroom community (Freeman et al., 2007). The vast majority of this research has been conducted with elementary and middle school students. For example, studies with lower grade to higher grade students have supported the need of relatedness and positive effects on cognitive performance and on emotional satisfaction (Baumeister & Leary, 1995).

When students feel distressed by external factors, they experience introjected regulation, external regulation, and amotivation, whereas they were significantly low on the intrinsic motivation to know. Booker (2008) supported the conclusion that college students' interactions with their professors were important indicators of their performance. Acknowledging that today's classrooms may be different, a study by Endo and Harpel (1982) reported that students process information better as they develop more of a sense of connection with peers and instructor. First year college students were more intrinsically motivated after developing good relations with peers and instructors (Freeman et al., 2007).

Overall, the results supported the hypothesis that positive experiences in the learning environment were related with higher degrees of academic motivation and negative experiences (feeling distressed) were related with the more extrinsic, less autonomous forms of regulation and also with amotivation. The interesting point was that identified regulation (the most autonomous form of extrinsic motivation type just before intrinsic motivation towards accomplishment) was positively correlated with sense of classroom community, whereas intrinsic motivation towards accomplishment did not show significance on any of the measures. This may indicate that students did not enjoy being challenged, even though being challenged is intrinsic to the nature of graduate studies. As an indicator of identified regulation, students may be counting graduate school as an important step to be passed before continuing on to their careers but not purely enjoying it, which is essential to the nature and expected

purpose of graduate studies especially in a large research university. When we consider the findings from a different perspective, students with positive experiences scored high on both intrinsic motivation (to know) and extrinsic motivation (identified regulation), which clarifies that the hypothesis was supported.

2. Will international students be more affected than non-international students by the use of culturally local examples or experiences used by the instructor or other students in instruction?

In the culturally blended learning environment, it is harder to meet the needs of everyone, for both students and instructors. Considering the community, as well as international students, it is also not easy for native speakers to adapt to international students' pronunciation and behaviors. For example, international teaching assistants seem to be at a disadvantage compared to their American colleagues, because even teaching assistants with good English is more likely to make mistakes under pressure or with sudden questions (Li, Mazer & Ju, 2011). Even though teaching college students is different than simply being in the same class with them; it is possible that some of their peers would also find international students culturally irrelevant or incomprehensible. In addition, for international students, it is possible that they might not enjoy when culture-specific examples are given, because they may not understand the context of these examples.

In general, international students were lower than American students on the external regulation as well as on sense of classroom community. For the item about culture-specific examples, results supported the hypothesis indicating that international students are more affected by culturally local examples used in class. Both at the college level and in graduate classes, international students have communication difficulties with their classmates and sometimes they perceive the host students' behaviors as dismissive and discriminating (Wadsworth, Hecht, & Jung, 2008). However, international students are ready for the possibility that Americans may have inaccurate knowledge and bias towards their culture, therefore they do not let perceived discrimination affect their academic performance (Wadsworth et al., 2008). In this study, international students were more sensitive to culturally local examples used in class, and they were lower in sense of community. It seems like international students can tolerate inaccuracy but not discrimination or underestimation. When they feel misperceived, it is not possible to feel a part of classroom community emotionally.

3. Are higher levels of feeling ingroup during a class associated with higher scores on the intrinsic motivation scales and with lower scores on the extrinsic motivation and amotivation subscales?

With average scores on classroom community and positive support and respect subscales as the ingroup variable, the results revealed that students feeling ingroup reported higher levels of intrinsic motivation (to know, and towards accomplishment) and higher identified regulation. Individuals form groups as a reflection of a part of their own selves and seek compatibility among group members. Tajfel (1974) explained, "It can be assumed that an individual will tend to remain a member of a group and seek membership of new groups if these have some contribution to make to the positive aspects of his social identity; i.e. to those aspects of it from which he derives some satisfaction" (p. 69). In a learning environment, students would be looking for fellow students with similar interests in addition to being supportive, encouraging to one another. Because ingroup identification brings a more positive self-perception, many studies have shown a positive association between ingroup identification and positive outcomes such as well-being, health, performance, and enhanced motivation (Amiot & Sansfacon, 2011; Laar et al., 2010; Ryan & Deci, 2003). Also, members of

informal groups obtain better outcomes (Sheldon & Bettencourt, 2002). In U.S. universities, the learning environment of graduate schools is usually informal, and, individuals share a common purpose to learn and produce instead of seeking status over one another. Therefore, such an environment would be another factor that would contribute to the enhanced motivation of students.

It is found that perceptions of ingroup were associated with higher levels of both intrinsic and some levels of extrinsic motivations. Within social identity, enhancement of motivation is obtained also by keeping the authenticity of identity. Even individuals who do not belong to ingroup enhance their motivation and performance when group members support them and give them opportunity (Laar et al., 2010). Sheldon and Bettencourt (2002) for the first time used Self Determination Theory in relation to social group differentiation. In their study, autonomy and relatedness were used as the major components to measure group identification and how supportive a group is. They suggested that the more encouraging and respectful to the identity of the members (supporting autonomy) a group is, the more positive outcomes are found.

4. Are there any differences on the learning community and self-determined motivation subscales between groups representing gender, age levels, disciplines, ethnicity, and years spent in graduate school?

The analysis of the demographic variables showed that women and men did not differ on their sense of classroom community and academic motivation, but did show some differences on the self-determined motivation scales. However, the majority of studies have claimed that female students are more effective in building relations and community than male students. For example, both in distance learning and blended learning environments, women were more interactive and supportive, whereas men were more critical and formal (Graff, 2003; Rovai, 2001). Therefore, women usually report a higher sense of community relative to men. In a study about students' course drop out and initial motivation towards a course, female students reported higher self-determined motivation (Vallerand & Bissonette, 1992). There were no gender differences found in this study.

Among age groups, students between the ages of 19-23 were less motivated (amotivation) to be in graduate school when compared to 30-35 and 43-older age groups. The same young group (19-23 years) reported experiencing less support, compared to the 24-29 age group which had the highest support. It is possible that these groups had different reasons for going to graduate school. Students in the youngest age group newly experience the responsibilities of a graduate student life whereas the older groups know what to expect and they chose to return to school with a more conscious choice. Brouse et al. (2010) found a significant decline happened on college students' motivation levels as the years passed, and women always had higher motivation, even during decline.

As to the number of years in graduate school, students were in their 1st, 2nd, and 5th or more years in graduate school had more support and respect than 4th year students. This result is likely to be because of low sample size of 4th year students relative to others. However, it's also possible that there is more course work in the first years so students have more chance to see one another and have more shared experiences. In the last years, they probably are more involved in research and are not in class that much. Partly supporting this study's results, in an attempt to define international students' isolation in a U.S. campus, Erichsen and Bolliger (2011) reported that first year students and master's students were more tolerant to the self, and they reported less isolation than students in further grades, supporting one of the findings

of my study. As well as second and third year students, women also perceived less respect and support as an addition to previous findings.

As to the discipline variable, education majors were higher on intrinsic motivation to experience stimulation than engineering students, and natural science majors were the lowest on that measure. Additionally, education majors were the highest on identified regulation followed by natural sciences and then engineering majors. For all majors, identified regulation was stronger than intrinsic motivation to experience stimulation. Natural science majors seemed affected the most by their emotions as reflected in their low levels of intrinsic motivation.

Finally, as for the ethnicity variable, European descent white students (n=177) had significantly higher scores on the classroom community measure than non-European descent students (n=77). Perhaps because European descent white students represented a higher percentage of their classes, it may be easier for them to build community. As hypothesized, the international students (n=45) had lower scores on measure of classroom community and higher scores of external regulation than non-international students. This supports my idea that the more fulfillment of relatedness will be associated with less extrinsic motivation. And again the difference in sample size for the two groups may have influenced the findings. In U.S. academic programs international students have reported academic and social isolation in graduate school, and a low sense of classroom community both in their traditional and online classes (Erichsen & Bolliger, 2011). In their study investigating students' connectedness to their campus, Summers et al. (2002) also did not find any difference among ethnic groups. However, women had higher scores than men, sophomores had a lower sense of connection than seniors, and natural science majors had the lowest sense of campus community.

CONCLUSION

Overall, the results of this study suggested that classroom community and positive respect and support from peers and instructors are important for the fulfillment of basic needs of students in a learning environment, associated their motivation greatly. When students feel they are a part of the learning environment and perceive kind and encouraging behaviors around them, they feel ingroup. This directly influences their performance by motivating them to learn and accomplish, or at least to see the importance and value of their work. Among these graduate students, international students particularly seemed more sensitive to the use of cultural examples, and had more difficulty forming a sense of classroom community.

RECOMMENDATIONS

This study takes a step to extend the literature and to investigate graduate students' experiences. Further research is needed about graduate students, their motivation, well-being, and their interactions. In the future, studies of social identity in particular should be considered as an important separate construct, using multiple methods. It is important to focus on a specific course and instructor, using quantitative and qualitative methods together. In an attempt to reveal the perceptions towards and of international students, it would be interesting to use different theories such as Communication Theory of Identity (Wadsworth et al., 2008). Qualitative investigations, observations, creative social experiments would also bring necessary insights. Common usage of online tools such as Blackboard in U.S. provides an opportunity for the representations of identities and allows individuals to communicate with each other. It can be considered to investigate both the instructors' perception, and the student's to have a fuller view representation. If these are done in comparison to face-to-face classroom experiences, with in depth interviews, and with observations as well as quantitative data, we would have invaluable insights of learners' world.

All in all, this study had many limitations however; it showed promise for further investigation with a multi-structured research. The findings will be helpful for both students and instructors to be sensitive about the examples they use in class. Our behaviors are really impactful in the learning environment. In addition, usage of cultural examples is important so giving more voice to students to present their own examples may be helpful to boost the sense of community. It is important to realize that graduate students are not much different than other learners and they have fluctuating motivations. Hence, it is important to support them and to build an environment in which students and instructors respect one another for better outcomes.

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Assessment Of Conditional Cash Transfer Scheme And Poverty Alleviation Among Rural Poor In Cross River State, Nigeria

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ABSTRACT

This study examines the impact of conditional cash transfer scheme on poverty alleviation in the rural communities of Cross River State, Nigeria. The ex-post facto research design was adopted and three hypotheses were formulated in this study. The instrument for data collection was a thirty (30) item structured questionnaire and Focus Group Discussion. The population of the study comprises 2940 beneficiaries of the conditional cash transfer in the eighteen local government areas of the state, from 2010 to 2017. Cluster and simple random sampling techniques were used to select 1176 respondents. The hypotheses were analysed using Pearson product moment correlation. The findings revealed that conditional cash transfer scheme have significant relationship with poverty alleviation in terms of increase school enrolment and had tremendously helped in improving health services utilisation as most of the beneficiaries of this programme were able to access health facilities better than before the scheme. This intervention has equally helped beneficiaries to acquire requisite entrepreneurial skills that helped them to transform their lives and standard of living. On the basis of these findings it is recommended that the government should increase the number of household beneficiaries for wider coverage and spread as well as establish more health facilities in the rural areas. More so, the government should increase the number of people enlisted for entrepreneurial training and skills acquisition. (Word Count 222)

Key words: Assessment, Conditional Cash Transfer Scheme, Access to education, Health services utilization, Entrepreneurial development, Poverty alleviation

INTRODUCTION

In Cross River State about 75per cent of the total population live below the poverty line of \$1.25 per day. There is high Maternal Mortality Rate (MMR) of 2,000 deaths in every 100,000 live births against (national average: 800/100,000), and high infants mortality rate of 245 deaths in every 100,000 infants live birth against the (national average of 100 deaths in every 100,000 birth as well as the child immunization rate of 48.33-48.9per cent and average coverage of 75per cent as at May 2009 [1]. Also, malnutrition rate of about 11.1-17.5per cent of the total children population as well as HIV/TB rate is put at 25per cent in 2006 [2].

Generally these are great social welfare indicator gaps that caused the Cross River State government to implement a conditional cash transfer scheme in the state. Conditional cash transfer scheme christened by the Cross River State government as 'Project Comfort' was introduced to manage the problem of poverty at the grass root. It was meant to address the problem of poverty among the rural poor and to improve their standard of living through the

provision of economic and entrepreneurial development. It is a synergy and tool to promote wealth creation and entrepreneurial development among the poor. The basic goal of the "project comfort" is to transfer cash benefits to rural poor in order to alleviate rate of poverty among rural poor at the long run.

However, how effective these conditional cash transfer schemes have been and the sincerity in implementing them remains a recurring question in many cycles. It is frustrating to note that from 2000 to now there has not been demonstrable evidence to document the success of all the programmes implemented in Nigeria. Often time policy implementation is misdirected and the deserving poor are excluded from participation or denied access to social amenities' therefore gaining access is conditioned on the fact that actions of households will yield positive result which inadvertently promote the overall good of the society. It is against this background that this study examines the impact of conditional cash transfer programme on poverty alleviation in the rural communities of Cross River State of Nigeria.

Research questions

1. How does conditional cash transfer relate to access to education among rural poor in Cross River State?
2. Does conditional cash transfer relate to health services utilization among rural poor in Cross River State?
3. To what extent does conditional cash transfer scheme relate to entrepreneurial development among rural poor in Cross River State?

Objectives of the study

1. To determine the relationship between conditional cash transfer and access to education among rural poor in Cross River State.
2. To ascertain how conditional cash transfer relate to health services utilization among rural poor in Cross River State.
3. To determine the extent to which conditional cash transfer scheme relate to entrepreneurial development among rural poor in Cross River State

Research hypotheses

1. There is no significant relationship between conditional cash transfer scheme and access to education among rural poor in Cross River State
2. There is no significant relationship between conditional cash transfer scheme and utilization of health services among rural poor in Cross River State
3. There is no significant relationship between conditional cash transfer scheme and entrepreneurial development among rural poor in Cross River State

LITERATURE REVIEW

Conditional cash transfer and access to education

A number of evaluations in Cambodia, Turkey, Ecuador, Mexico, Nicaragua and Jamaica had shown that there is impact of conditional cash transfer scheme on education [3]. This effect is noticeable among some age groups where the programme is tailored on girl child education. In Mexico the impact of Oportunidades in rural areas is significant for children making the transitions from primary to secondary school and has a great positive spill over effect on school enrolment increase. The issue of how transfer size can affect enrolment and retention is highly content specific and will depend on a variety of other factors [4]. Timing of payment is essentially important and that a bimonthly or monthly payment design can affect the attendance and enrolment. Even among the poor there may be heterogeneity in expected return to schooling and enrolment [5].

There are several reasons why one might expect that the impact of conditional cash transfer scheme would be larger for the poorest household. Those households have worse education outcomes at baseline, so there are more margins for improvement [6]. They tend to face more constraints that affect their schooling choices and in Mexico Oportunidades programme effects are largest for children with the lowest propensities to enrol in school at baseline [7].

Conditional cash transfer helps to increase the prevalence and amount of child enrolment in primary and secondary schools [8]. Conditional cash transfer conditionalities also increases parents awareness of schooling and health care attendance and thereby decrease child labour, thus the parents are less likely to depend on the income of their children and are able to communicate the importance of school attendance [9]. Depending on the focus cash transfer can support girls' education and their access to health care and other basic social services [10].

In Colombia, the conditional cash transfer programme under the graduate internship scheme of the community services and Technical Vocational Education and Training (TVET) Programme trained more than 5000 youths yearly on various skills [11]. On the performance of conditional cash transfer in Mexico, it was reported that 81,876 youths were trained on various skills, and 1100 were given cash grants to cater for their educational needs while 830 benefited from its infrastructural development scheme [12]. The graduate internship scheme (GIS) of conditional cash transfer cost the country N900m monthly [12]. The N900m figure is based on the N18, 000 monthly stipend paid to about 50, 000 graduates that benefit from the scheme in the 2013 fiscal year [12]. The conditional cash transfer was part of the government's tripod strategy towards addressing poverty and ignorance in Nigeria. It is a social safety net to provide short term avenues for people to reduce poverty levels in their lives. The scheme had also partnered with firms and institutions in which they get free labour and undertake to groom and mentor the interns to acquire skills on the job experience while government pays stipends to the interns [13]. One of the aims of conditional cash transfer through its Educational Development Service (EDS), is to tackle the problem of ignorance by training young people on internship skills in Brazil [14]. The internship skills were designed to be created in labour intensive community development services. The beneficiaries of the internship programme were trained in some basic skills and supplied with working tools and equipment as appropriate [14].

Conditional cash transfer and health services utilization

Regular use of health services is a significant and an integral part of many conditional cash transfer programmes and evidence abound from Latin America experience. Conditional cash transfer programme compels benefiting household to make regular use of health care services and facilities than they would have made in the absence of the interventions, especially in maternal health and preventive health check-ups for children, more particularly on growth monitoring, immunisation and weight [15].

In Jamaica, there is significant effect of the programme on the preventive health care visits by children under the age of six (6) years [16]. The programme have positive effect for 'familias en accion' on immunisation rates [9]. There is large impact of the programme on full and vaccination coverage in Nicaragua [17]. Conditional cash transfers accelerate reduction in morbidity and mortality by working on the 'demand side' to help poorer families to overcome the economic barriers to access and use health services [18]. The hallmark of conditional cash transfers for health concerns is behavioural change towards the utilization of health services. It provides the households with income transfer that is conditional on health care visitations when the need arises [19]. The impact of conditional cash transfer in health outcomes could be as result of the income effect associated with the transfers, the explicit conditionalities impacts

on health services on a large extent that it regulates the behaviour of the households. In Nigeria, transfers are condition precedent and failure of benefiting families to meet regular health visit for children under five (5) years and 85 percent school attendance can result to disqualification [20]. Therefore household ensure strict compliance to conditionalities to keep receiving the transfers.

The conditional cash transfer programme in Nigeria requires and combines a traditional cash transfer program with financial incentive for positive behavioural change in health, education, nutrition and small-scale enterprise formation [21,33].

Conditional cash transfers are disbursed conditionally on the household engaging in a set of behaviour change designed to improve health, education and nutrition including prenatal care, as well as baby care, immunization, nutrition monitoring and supplementation, preventive health check-ups and participation in educational programmes [22]. Conditional cash transfers empower the poor to make their own decision to improve their lives by going for regular check-ups and other health care services and reducing deprivation and vulnerability [23].

There is extensive and generalizable evidence that cash transfers have reduced the depth at which the poor patronize traditional medicine and instead utilizes health care services across countries implementing conditional cash transfer [24]. This evidence suggest that conditional cash transfers constitute the most direct possible approach to addressing health care utilization by directly providing income to households and raises the standard of living, reduces the severity of poverty and vulnerability as well as shift the distribution of income, so closing the gap between the rich and poor [25].

The degree to which conditional cash transfers are able to motivate or encourage households to utilise health services depend on the ability of the benefiting households to use this support to leverage step-wise change in their circumstance [26]. Conditional cash transfer can create livelihood options and opportunities which enable households to see the need of accessing health services in order to cushion families from worst effects of health crisis [27].

One of the strongest and consistent findings regarding the impact of conditional cash transfer programme is their contribution to health care of individuals and households. The impact of conditional cash transfer on health care has been most pronounced in low income countries where poverty is generally more severe. In this circumstance, households are particularly likely to prioritise spending on improving their health and reduce the likelihood of dying young or contracting diseases or infections [28].

Conditional cash transfer and entrepreneurial development

Conditional cash transfers encourage parents to assist in the entrepreneurial development of their children [29]. Some of the conditional cash transfer programmes includes income support through participations in public works programmes, cash transfer to poor vulnerable household to train their children, acquire skills, seek medical services or embark on small scale businesses or even providing take of grants to poor or vulnerable households to do one form of business or the other [30]. Over the past 15 years, governments in developing countries have invested on large scale cash transfer programmes, which are now estimated to have reached from 750 million to one billion people towards promoting entrepreneurial development [31].

Governments in low income countries like Uganda, Kenya, Ethiopia and Nigeria have since began to develop interest and to promote entrepreneurial development among the poor through cash transfers [24]. Currently, almost all third world countries are involved in

conditional cash transfer programmes as a way of promoting entrepreneurial spirit among the citizenry in their countries. The use of conditional cash transfer in developing small and medium scale enterprises in Ghana has been described as monumental by development experts [31]. This rapid spread of small and medium enterprises in Ghana has been driven by government recognition that entrepreneurial development results to household's opportunities to break away from poverty circle. It also brings increased funds which can push many away from poverty [21,31].

There is growing evidence that cash transfer have help people escape chronic, often intergenerational poverty by leveraging gains in non-income human development out comes, accelerating progress towards Millennium Development Goals (MDGs) targets [29]. Evidence from Ethiopia and Bangladesh suggest that cash transfers were used as catalyst to promote livelihood through complementary interventions (e.g. skill training and participation in agricultural extension programmes). In Zambia and Namibia the introduction of cash transfer to poor remote areas, stimulated demand and local market development [9,29].

In Mexico (Oportunidades) cash transfers have often helped to increase the role of women in entrepreneurial development decisions and promoted more balanced gender relations in all forms of human developments. Olayemi (2015) affirmed that conditional cash transfer had increased the number of people empowered in entrepreneurial development in Mexico from 8.5 per cent to 6.8 per cent and also increased the number of participants in skills acquisitions from 3.0 per cent in 1997 to 5.4 per cent in 2008. Conditional cash transfer scheme is implemented to manage the problem of poverty at the grass root, and as a synergy and tool to promote wealth creation and entrepreneurial development among the poor [10,25]. The basic goal of conditional cash transfer is to transfer cash benefits to benefiting poor households in order to create small scale entrepreneurship which is largely believed will promote and boost socioeconomic development of the society especially amongst benefiting households [10].

In Nigeria conditional cash transfer makes payment to poor households on the condition that they invest in entrepreneurial of their children in certain pre-specified ways. There are two broad reasons why conditions are pre-specified before conditional cash transfers commences in any locality [26]. Firstly, if private investment in children's entrepreneurial is thought to be too low. Secondly, if political economy conditions shows little support for redistribution unless it is seen to be conditional on "good behaviour", by the "deserving poor"[31]. This presupposes that households are paid transfers to encourage them invest in meaningful business ventures [10].

Conditional cash transfers focuses on building the entrepreneurial of children (rather than on simply supporting parents), and adds to conditional cash transfers political acceptability as an instrument to promote opportunities [32]. It is hard to blame children for being poor, thus using public resources to support the entrepreneurial development of the poor children makes conditional cash transfer a poverty reduction initiative than a social assistance [33].

RESEARCH METHODOLOGY

The ex-post facto research design was adopted in this study which allows the use of part of the population of the study for data generalisation. The population of study consists of 2940 beneficiaries from the 196 political wards (Northern senatorial district 54, Central 66, and Southern 76 wards) receiving conditional cash transfer benefit in the 18 local government areas of the state.

The sampling procedure employed for this study was cluster and simple random sampling technique. The respondents were selected from the existing cluster of the 196 political wards in the 18 local government areas of the state. In each political ward, there are not less than 15 beneficiaries. Forty per cent of beneficiaries were selected from each political ward in the study area using the random sampling procedure and a total of 6 respondents were selected from each political ward given a total of 1176 respondents. The questionnaire and focus group discussion formed the major instrument for data collection for the study. The instrument was entitled: Conditional Cash Transfer Scheme and Poverty Alleviation Questionnaire, and is made up of 30 items. Data entry and analysis were done using Microsoft excel (for cleaning) and the statistical package for Social Science(SPSS version 20). Results generated were expressed as percentages and presented in tables, charts and graphs. Pearson product moment correlation was used to test the hypotheses.

RESULTS

TABLE i: Responses on conditional cash transfer and access to education

Items	SA	per cent	A	per cent	D	per cent	SD	per cent
Able to pay fees for children without stress	708	62.11	304	26.67	70	6.14	58	5.09
Able to buy books for children without stress	594	52.11	374	32.81	118	10.35	54	4.74
Able to provide school uniform for children	574	50.35	392	34.39	94	8.25	80	7.02
Able to change children schools to more expensive schools	334	29.30	238	20.88	246	21.58	322	28.25
Able to assist extended families in paying their fees	434	38.07	334	29.30	236	20.70	136	11.93
Not able to meet up with school demand of children	174	15.26	230	20.18	526	46.14	110	18.42

Source: Field work 2018

The result in Table i revealed that 62.11 per cent (N= 708) of the respondents strongly agreed to item 1, "I am able to pay fees for children without stress after conditional cash transfer programme", 26.67 per cent (N=304) agreed, 6.14 (N=70) per cent disagreed while 5.09 per cent (N=58) strongly disagreed with the statement. Respondents opinion to 'item 2' in the subscale reveals that majority of the respondents 52.11 per cent (N=594) of the respondents strongly agreed that they are able to "buy books for their children without stress after conditional cash transfer programme", 32.81 per cent (N=374) agreed, 10.35 per cent (N=118) of the respondents disagreed while only 4.74 per cent (N=54) strongly disagreed with the statement.

Responses to "item 3" in this subscale reveal that majority of the respondents 50.35 per cent (N=574) strongly agreed that they are able to "provide school uniform for their children after conditional cash transfer programme", of the respondents 34.39 per cent (N=392) agreed to the statement, 8.25 per cent (N=47) disagreed while only respondents representing 7.02 per cent (N=80) strongly disagreed with the statement. Responses to 'item 4' on this subscale reveal that majority of the respondents 334 representing 29.30 per cent strongly agreed that "they are able to change their children schools to more expensive schools after conditional cash transfer programme", 238 respondents representing 20.88 per cent agreed, 246 respondents representing 21.58 per cent disagreed while 322 respondents representing 28.25 per cent strongly disagreed with the statement.

Responses to "item 5" in this subscale reveal that majority of the respondents 434 representing (38.07) per cent strongly agreed that "they are able to assist extended families in paying their fees after the conditional cash transfer programme", 334 respondents representing (29.30) per cent agreed, 236 respondents representing (20.70) per cent disagreed while only 136 respondents representing (11.93) strongly disagreed with the statement.

Responses to "item 6" in this subscale reveal that only 174 of the respondents representing (15.26) per cent strongly agreed that "they are not able to meet up with school demand of children", 230 respondents representing (20.18) per cent agreed, while majority of the respondents 526 representing (46.14) per cent disagreed and 210 respondents representing (18.42) per cent strongly disagreed.

TABLE ii: Responses on conditional cash transfer and health services utilization

Items	SA	Per cent	A	Per cent	D	Per cent	SD	Per cent
Beneficiaries are able to send their children to the hospital for treatment	542	47.54	414	36.32	104	9.12	80	7.02
Able to pay hospital bills of the family	636	55.79	434	38.07	52	4.56	18	1.58
Send children under five for immunization	850	74.56	174	15.26	90	7.89	26	2.28
Able to buy all drugs prescribed by the doctor to family members	784	68.77	124	10.88	156	13.68	76	6.67
Need assistance in the treatment of minor illness to family members	134	11.75	344	30.18	364	31.93	298	26.14
Cannot afford basic health facilities to family members	116	10.18	184	16.14	594	52.11	246	21.58

Source: Fieldwork, 2018

The result in Table ii indicate that majority of the respondents 542 representing (47.54) per cent strongly agreed to "item 1" which states that "beneficiaries are able to send their children to the hospital for treatment after conditional cash transfer programme", 414 respondents representing (36.32) per cent agreed, 104 respondents representing (9.12) per cent disagreed and only 80 respondents representing (7.02) per cent strongly disagreed with the statement.

Responses to "item 2" in this subscale reveals that majority of the respondents 636 representing (55.79) per cent strongly agreed that "they are able to pay hospital bills of the family after conditional cash transfer programme", 434 respondents representing (38.07) per cent agreed, 52 respondents representing (4.56) per cent disagreed and only 18 respondents representing (1.58) per cent strongly disagreed to the statement.

Responses to "item 3" in this subscale reveals that majority of the respondents 850 representing (74.56) per cent strongly agreed that "they are able to send children under five for immunization after conditional cash transfer programme", 174 respondents representing (15.26) per cent agreed, 90 respondents representing (7.89) per cent disagreed while only 26 respondents representing (2.28) per cent strongly disagreed. Responses to "item 4" in this subscale reveals that majority of the respondents 784 representing (68.77) per cent are able "to buy all drugs prescribed by the doctor to family members", 124 respondents representing (10.88) per cent agreed, 156 respondents representing (13.68) per cent disagreed while only 76 respondents representing (6.67) per cent strongly disagreed.

Responses to "item 5" in this subscale reveals that only 134 respondents representing (11.75) strongly agreed that "they need assistance in the treatment of minor illness to family members", 344 respondents representing (30.18) per cent agreed, majority of the respondents

364 representing (31.93) per cent disagreed while 298 respondents representing (26.14) per cent strongly disagreed with the statement

Responses to "item 6" in this subscale reveal that only, 116 respondents (10.18) per cent agreed that "they cannot afford basic health facilities to family members after conditional cash transfer programme", 184 respondents representing (16.14) per cent agreed, while majority of the respondents 594 representing (52.11) per cent disagreed and 246 respondents representing (21.58) strongly disagreed to the statement.

TABLE iii: Responses on conditional cash transfer and entrepreneurial development

Entrepreneurial skill development	SA	per cent	A	per cent	D	per cent	SD	per cent
Conditional cash transfer helps the poor to acquire assets and increase small scale investment opportunities	756	66.32	218	19.12	94	8.25	72	6.32
Increases their purchasing power and increase the financial inclusion of the poor	636	55.79	314	27.54	76	6.67	114	10.00
Conditional cash transfer enhances the ability of the poor to vocational skill acquisitions	424	37.19	336	29.47	166	14.56	214	18.77
Increase self-employment and wages of poor households	652	57.19	344	30.18	86	7.54	58	5.09
Conditional cash transfer promotes enterprise formation, skill and vocational training among households	704	61.75	244	21.40	126	11.05	66	5.79
Most people have access to credit facilities and financial services	558	48.95	364	31.93	78	6.84	140	12.28

Source: Fieldwork 2018

The result in Table iii revealed majority of the respondents 756 (66.32) per cent strongly agreed that "conditional cash transfer helps the poor to acquire assets and increase small scale investment opportunities", 218 respondents representing (19.12) per cent agreed, 94 respondents representing (8.25) per cent disagreed while only 72 respondents representing (6.32) per cent strongly disagreed with the statement.

Responses to "item 2" in this subscale reveal that majority of the respondents 636 representing (55.79) per cent strongly agreed that "conditional cash transfer has increase their purchasing power and increase the financial inclusion of the poor", 314 respondents representing (27.54) per cent agreed, 76 respondents representing (6.67) per cent disagreed and 114 respondents representing (10.0) per cent strongly disagreed with the statement.

Equally, responses to "item 3" in this subscale reveal that majority of the respondents 424 representing (37.19) per cent strongly agreed that "conditional cash transfer enhances the ability of the poor to vocational skill acquisitions", 336 respondents representing (29.47) per cent agreed, 166 respondents representing (14.56) per cent disagreed and 214 respondents representing (18.77) per cent strongly disagreed with the statement.

Additionally, responses to "item 4" in this subscale reveal that majority of the respondents 652 representing (57.19) per cent strongly agreed that "conditional cash transfer increase self-employment and wages of poor households", 344 respondents representing (30.18) per cent agreed, 86 respondents representing (7.54) per cent disagreed while only 58 respondents representing (5.09) per cent strongly disagreed with the statement.

Furthermore, responses to "item 5" in this subscale reveal that majority of the respondents 704 representing (61.75) per cent of the respondents strongly agreed that "conditional cash

transfer promotes enterprise formation, skill and vocational training among households”, 244 respondents representing (21.40) per cent agreed, 126 respondents representing (11.05) per cent disagreed while 66 respondents representing (5.79) per cent strongly disagreed.

Responses to "item 6" in this subscale reveal that 558 respondents representing (48.95) percent strongly agreed that respondents representing (31.93) per cent strongly agreed that "most people have access to credit facilities and financial services in the conditional cash transfer programme", 364 respondents representing (31.93) per cent agreed that "most people have access to credit facilities and financial services in the conditional cash transfer programme", 78 respondents representing (6.84) per cent disagreed while 140 respondents representing (12.28) per cent strongly disagreed with the statement.

TEST OF HYPOTHESES

Hypothesis one

H₀: There is no significant relationship between conditional cash transfer scheme and access to education among rural poor in Cross River State

H₁: There is significant relationship between conditional cash transfer scheme and access to education among rural poor in Cross River State

The independent variable is conditional cash transfer scheme while the dependent variable is access to education among rural poor in Cross River State. The hypothesis was analyzed using Pearson Product Moment Correlation analysis (rxy) tested at .05 level of significance. The result of the analysis is presented in Table iv.

TABLE iv: Pearson product moment correlation analysis of the relationship between conditional cash transfer scheme and access to education among rural poor in Cross River State (n=1176)

Variables	X	SD	ΣX ΣY	ΣX^2 ΣY^2	ΣXY	R
Conditional cash transfer	15.85	12.38	3890	7154	31344	0.628*
Access to education	16.13	12.19	6901	8260		

*Significant at 0.05 level, critical $r = 0.133$, $df = 1174$

Given that the calculated R-value of 0.705 is greater than the critical r-value of 0.628 at 0.05 levels of significance with 1174 degrees of freedom, the null hypothesis is rejected while the alternate hypothesis is accepted. Hence, conditional cash transfer scheme has a positive significant relationship with access to education among rural poor in Cross River State.

Hypothesis two

H₀: There is no significant relationship between conditional cash transfer scheme and health services utilization among rural poor in Cross River State

H₁: There is significant relationship between conditional cash transfer scheme and health services utilization among rural poor in Cross River State

The independent variable is conditional cash transfer scheme while the dependent variable is health services utilization among rural poor in Cross River State. The hypothesis was analyzed using Pearson Product Moment Correlation analysis tested at .05 level of significance. The result of the analysis is presented in Table v.

TABLE v: Pearson product moment correlation analysis of the relationship between conditional cash transfer scheme and health services utilization (n=1176).

Variables	Mean	SD	ΣX ΣY	ΣX^2 ΣY^2	ΣXY	R
Conditional cash transfer	13.88	12.85	5659	6760		
					77331	0.520*
Health services utilization	15.13	13.19	7101	9260		

*Significant at 0.05 level, critical r = 0.133, df = 1174

The result of the analysis reveals that the calculated r- value of 0.520 is greater than the critical R-value of 0.133 at 0.05 levels of significance with 1174 degrees of freedom. With the result of this analysis the null hypothesis is rejected while the alternate hypothesis is accepted. This result shows that conditional cash transfer scheme has a significant relationship with private sector participation in Calabar carnival festival and health services utilization among rural poor in Cross River State.

Hypothesis three

H₀: There is no significant relationship between conditional cash transfer scheme and entrepreneurial development among rural poor in Cross River State

H₁: There is significant relationship between conditional cash transfer scheme and entrepreneurial development among rural poor in Cross River State

The independent variable is conditional cash transfer scheme while the dependent variable is entrepreneurial development among rural poor in Cross River State. The hypothesis was analyzed using Pearson Product Moment Correlation analysis tested at .05 level of significance. The result of the analysis is presented in Table vi.

TABLE vi: Pearson product moment correlation analysis of the relationship between conditional cash transfer scheme and socio entrepreneurial development (n=1176)

Variables	Mean	SD	ΣX ΣY	ΣX^2 ΣY^2	ΣXY	R
Conditional cash transfer scheme	14.93	12.63	7510	8820		
					69673	0.549*
Entrepreneurial development	15.13	13.19	7601	11260		

*Significant at 0.05 level, critical r = 0.133, df = 1174

Since the calculated R-value of 0.685 is greater than the critical r-value of 0.549 at 0.05 level of significance with 1174 degree of freedom, the null hypotheses is rejected while the alternate hypothesis is retained. Hence, there is significant relationship between conditional cash transfer scheme and entrepreneurial development among rural poor in Cross River State.

DISCUSSION

Conditional cash transfer and access to education among rural poor in Cross River State

The first finding of this study revealed that there is a significant relationship between conditional cash transfer and access to education among rural poor in Cross River State. The findings corroborate Parker and Sakoufies [8] who reported that conditional cash transfer enables awareness creation as well as empower parents to send their children to school. This finding is in agreement with the finding obtained by Todaro (2006) who found that there exists

a significant influence of microcredits provided under the conditional cash transfer scheme on access to education of the beneficiaries of the programme. The finding equally agree with Fernal and Norton (2008) who asserts that conditional cash transfer has the potential to reduce poverty among the poor if appropriately applied and promote educational attainment. The finding also corroborates World Bank (2013) position that poverty prevents people from meeting educational needs of their children but with the proper implementation of conditional cash transfer, many parents can be able to send their children in schools and also meet their needs. Further-more, the findings supports Baird, McIntosh and Ozler (2009) who reported that conditional cash transfer influences enrolment and regular attendance as well as prevent school dropout due to poverty. The finding also confirms the Cross River State Planning Commission (2014) position that the conditional cash transfer scheme of the state brought an increase in secondary school enrolment from 83,337 in 2010 to 110,108 in 2016, (32per cent) and primary school enrolment increased from 223,337 in 2010 to 295,973 in 2016, (30per cent). As observed in the study area, the conditional cash transfer scheme of the state government resulted to a lot of parents to send their children to school. A special package of the transfer targeted at school enrolment provided free education to children whose parents were too poor to send their children to school. This was confirmed by participants in a Focus Group Discussion that with the conditional transfer they were able to enlist their children in school and were able to afford the basic educational needs of their children.

Some of the participants stated thus: *The major problem in our community is that we are very poor people and mostly farmers. This scheme has really helped us and we thank God for the Governor who remembered the poor people because with this money we are able to send our children to school and do other small things for ourselves.*

In the educational package of the transfer scheme, 55 people were selected from each rural community of the state and were selected on conditions of their poverty with special attention given to widows, disables or indigent children. Another condition was that they would send their children to school. Some of these beneficiaries had collected the money which ranges from N5,000 to N10,000 for one year. Although the payment was not regular, they were always paid in trenches. Provision was also made for the training of youths in any trade or apprentice of their choice and the government gave them tools while some received cash to set up their businesses. It was further observed in this study that the total number of children who got enrolled in schools were mostly from beneficiaries of conditional cash transfers. Besides, the increase in availability and different types of conditional cash transfer produced a healthy climate among the people in such a way that every person want his or her child to go to school.

Conditional cash transfer and health services utilization

The second findings of this study revealed that there is significant relationship between conditional cash transfer scheme and health services utilization among rural poor in Cross River state. This finding is in agreement with Ayala [9] who found out that, conditional cash transfer interventions in Ecuador enhances access to health care facilities better than those that did not benefit from the programme and also reduces infant and maternal mortality rates. The study equally agree with Ariel and Norbert [29] who reported that cash transfer is a buffer for poor households to health care services utilisation. This finding is also in agreement with Ebong (2006) who in his study noted that one major factor that promoted access to health facilities is conditional cash transfer, as those that had health challenges were given health services free of charge. This current finding also agrees with Attanasio, Erich, Fitzsimon, Mesnard and Marcos (2015) who asserted that the conditional cash transfer programme of the conditional cash transfer made it possible for people in the rural areas to have access to microcredit scheme which enabled them to utilize health care services.

In Cross River State, rural folks were able to utilize health services because of the conditional cash transfer intervention. It was observed that a greater percentage of the people who live in rural areas with little or no access to modern health facilities patronize traditional birth attendants, spiritual homes and other places have now began to go to health care facility due to the conditional cash transfer that had made it easy for them to access health facilities. The government through the conditional cash transfer scheme built in each rural community a health center, making it easy for the rural poor to utilize health services. Hitherto, some rural people use to travel long distances to access health care services. The conditional cash transfer scheme in Cross River State has many different components. These include the Basic Income Support (BIS) in which the sum of ₦5000.00 monthly payment was given to beneficiaries and the Poverty Reduction Investment Component (PRIC) in which the sum of N7000.00 was paid monthly at the end of the support period as an exit strategy. These two schemes targets poor female headed household, poor widows headed households; poor aged headed households, households with physically challenged persons, Vesico Viginal Fistula (VVF) and households with HIV/AIDS and Tuberculosis persons as well as Orphans and Vulnerable Persons (OVC).

Also, the scheme covers social protection and security of vulnerable poor household such as those with physical disabilities, widows, orphans, children, aged and those living with HIV/AIDS and those living below the poverty line of \$1 per day as well as assist parents invest in the health care of their children and wards. Another strategy adopted to alleviate rural poverty is the provision of basic social services to the poor especially health care and family planning services, thus increasing the capacity of the poor to take advantage of these opportunities. Also, the Cross River State government through this transfer program, provided free health care for pregnant women and under 5 years children. Indeed, participants in the Focus Group Discussion accepted that they were able to access health services because of the conditional cash transfer scheme. Examples of the health care services mentioned include free Eye care and provision of eye glasses free of charge and free surgeries /operations. The conditional cash transfer has been a buffer for pregnant women to accessing antenatal care services and has significantly improved their labour outcomes. Under its primary health care scheme, conditional cash transfer had trained primary health care workers who provided quality antenatal, skilled birth delivery at birth and post-natal services for rural, poor women accessing maternal, neonatal and child health services. These health care workers comprised midwives, community health extension workers and female village health workers.

Conditional cash transfer and entrepreneurial development

The third finding in this study revealed that there is significant relationship between conditional cash transfer scheme and entrepreneurial development among rural poor in Cross River State. The finding supports Kabeer [24] conditional cash transfer is a direct approach to addressing extreme poverty, as beneficiaries have significantly utilized the fund in developing their businesses. The study equally agrees with Ebong (2006) who reported in his study that issues relating to child labour, unemployment and social vices had reduced and or eliminated when conditional cash transfer was introduced to alleviate poverty in the society. This finding is also in agreement with the finding of Olayemi (2015) who averred that the conditional cash transfer had improved the standard of living of the people through training and development of entrepreneurial skills.

In Cross River State, conditional cash transfer has significantly influenced entrepreneurial development skills among rural dwellers. Participants in the Focus Group Discussion affirmed that the transfer scheme has helped the youths to acquire entrepreneurial skills which has enable them to maintain their families and meet their immediate needs. Some of the rural youths were trained in trades like motor mechanics, aluminium fabrication, tailoring, hair

dressings, fashion designing and many others. Some rural youths were provided with tools and money at the end of their training to help them establish themselves. Most significantly, the conditional cash transfer scheme in the state had ignited the entrepreneurship potentials of the youths which enable them to create jobs for themselves. The Cross River State government also made available grants (money) for poor vulnerable households on the condition that they engage in entrepreneurial development of their children and wards through education, health and life support skills training. This is to encourage them to break out of the intergenerational circle of poverty, disease, illiteracy and generate great potentials for wealth creation, employment generation, acquisition of new skills and general improvement in their standard of living.

CONCLUSION

In this empirical study, it has been established that conditional cash transfer scheme of Cross River State have significant relationship with poverty alleviation in terms of increase school enrolment and had tremendously helped in improving health services utilisation as most of the beneficiaries of this programme were able to access health facilities better than before the scheme. This intervention has equally helped beneficiaries to acquire requisite entrepreneurial skills that helped them to transform their lives and standard of living. Therefore, for the conditional cash transfer to be sustained in order to effectively transform the rural areas and alleviate the poverty conditions of rural dwellers, it is recommended that the transfers support period of one year is not enough to remove one from poverty, hence the number of years should be increased to at least 3 to 6 years if school enrolment, retention and completion rates are to be achieved. The government should increase the number of household beneficiaries for wider coverage and spread as well as establish more health facilities in the rural areas. More so, the government should increase the number of people enlisted for entrepreneurial training and skills acquisition.

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Best Practices of Promoting a Positive School Learning Climate among Principals of Cluster Secondary Schools Towards Realization of Education Blueprint 2013-2025 Malaysia

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ABSTRACT

The purpose of the study was to investigate the best practices of promoting a positive school learning climate among principals of Cluster Secondary Schools Malaysia according to principals' and teachers' perceptions. The Principal Instructional Management Rating Scale (PIMRS) modified by Hallinger and Murphy (1987), Latip (2006), Hatta (2010), Surayya (2016) was used as the data collection instrument through survey questionnaire. There were 871 respondents of different genders, ethnics, type of schools, and, position of responsibilities at schools were participated. The result of the study shows that the highest score was on dimension 'Developing and Enforcing Academic Standards' with mean 4.290 and standard deviation 0.814. It was followed respectively by 'Providing Incentives for Learning' mean 4.060 and standard deviation 0.904; 'Protecting Instructional Time' mean 3.855 and standard deviation 0.963 and 'Providing Incentives for Teachers' mean 3.607 and standard deviation 1.095. Meanwhile, the two best statements practiced by the principals were 'Use assemblies to honor students for their academic work and/or behavior in classroom' mean 4.39 and 'Encourage teachers to start class on time and teach to the end of the period' mean 4.38. It is hoped that this study will provide useful findings which will effectively assist the process of promoting a positive school learning climate among principals and teachers of secondary schools. Consequently, facilitate and improve students' academic performance in achieving the first class human capital who compatibly excellent nationally and internationally as stipulated in the purpose of establishing the Cluster Secondary schools by the Ministry of Education towards realization of Vision 2020 and the Education Blueprint 2013-2025 Malaysia.

Keywords: Principals' best practices - positive school learning climate - high performing secondary schools

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INTRODUCTION

Principals who are accessible positively to the teachers and students contribute to a conducive climate for high school performance in various programmes includes academic, curriculum, co-curriculum, teachers' commitment, and, students' achievements. Harris and Lowery (2002) admitted, principals who take extra time to praise students for their achievements over the

intercom, in the newspaper, or with personal notes and e-mails create a positive school climate. The positive commitments of principals would develop harmony, creative, constructive, innovative, and, transformative environment to school which greatly contribute to promulgate Cluster school performance towards realizing the Education Blueprint 2013-2025 (Ministry of Education Malaysia, 2012).

LITERATURE REVIEW

Promoting a Positive School Learning Climate

The positive school learning climate refers to the norms and attitudes of the staff and students that influence learning in the school. This dimension consists of primarily indirect, though important, activities. The principal communicates expectations for students and teachers through the policies and practices promulgated by the school (Allen, Grigsby & Peters 2015).

The changing demands on schools in the twenty-first century require leaders who can challenge staff to mobilize their energies and adapt to changing requirements while controlling the stability and efficiency of the school organization as a whole. Leaders need to respond to the needs of diverse populations while maintaining high standards for instruction, which result in high levels of achievement (Knoll, 2002). Meanwhile, leaders play a critical role in creating a school environment that ensures learning activities are relevant to students' needs in order to accomplish high achievement.

Mc Carley, Peters & Decman (2016) in their recent studies have documented that student achievement is strongly influenced by principals. The study claimed that schools really can make a difference in the achievement levels of students, but a school is most often only as good or bad, as creative or sterile, as the person who serves as the head of that school. O'Malley, Voight, Renshaw, & Eklund (2015) observed that the Principals of effective schools are strong instructional leaders who know how to manage time and money effectively. They concentrate on priority goals and have high expectations for all students.

The above discussion shows that the Principals can influence student and teacher attitudes through the creation of a reward structure that reinforces academic achievement and productive effort; through clear, explicit standards embodying what the school expects from students; through the careful use of school time; and through the selection and implementation of high-quality staff development programmes.

Hallinger and Murphy (1987), Latip (2006), Muhammad Hatta (2010), and, Surayya (2016) affirmed that principals foster effectively the 'development of a positive school learning climate' conducive to teaching and learning as stipulated in the Instructional Leadership through the functions of 'protecting instructional time', 'providing incentives for teachers', 'developing and enforcing academic standards', and, 'providing incentives for learning'.

Protecting Instructional Time

Hallinger and Murphy (1987) stated that the principal should ensure the importance of providing teachers with blocks of uninterrupted instructional time. Teachers' classroom management and instructional skills are not used optimally if instruction is frequently interrupted by announcements, tardy students, and requests from the office.

The principal can control this area of activity through the development and enforcement of schoolwide policies. Principals who successfully implement policies that limit interruptions of classroom learning time can increase allocated learning time and, potentially, student achievement (Mohamad Johdi Salleh & Muhammad Hatta. (2011).

According to Ginsberg and Murphy (2002), principals need to regularly visit the classroom. Through these visits (i) principals become more familiar with the school's curriculum and teachers' instructional practices; (ii) principals can gauge the climate of a school; (iii) principals and teachers can examine instruction, student motivation and achievement together; (iv) principals establish themselves as campus leaders and instructional mentors, influencing teaching, learning, and ongoing school renewal; (v) students see that both the principal and teachers value instruction and learning.

Therefore, protecting instructional time is an important task of the principal as instructional leader in order to enable him/her to ensure that the teaching and learning process is running well and to ensure that at times in each classroom both teaching and learning process are taking place.

Providing Incentives for Teachers

Hallinger and Murphy (1987) emphasized that an important part of the principal's role in creating a positive learning climate involves setting up a work structure that rewards and recognizes teachers for their efforts.

Bear, Yang & Pasipanodya (2015) admitted that Principals have few discretionary rewards to use with teachers. The single salary schedule and the tenure system severely limit principals' ability to motivate teachers. However, there are many forms of reward that are available to principals such as privately expressed praise, public recognition, and formal honours and awards. Meanwhile, incentive here does not mean that the principal should provide money to motivate teachers in performing their duties.

Blasé and Blasé (2000) provided a partial answer by asking teachers to describe the behaviour of principals who had a positive influence on student learning. Two broad themes emerged: talking with teachers and promoting professional development. These were expressed in specific types of behaviour such as making suggestions, giving feedback, modeling effective instruction, soliciting opinions, supporting collaboration, providing professional development opportunities, and giving praise for effective teaching (Mc Carley, Peters & Decman, 2016).

All these actions were carried out in a way that respected teacher knowledge and autonomy.

Developing and Enforcing Academic Standards

Clearly defined, high standards reinforce the high expectations necessary for improving student learning. One study that compares successful and less successful schools found that successful schools tended to require mastery of a defined set of skills prior to entry into the following grade. High standards are also promoted when increasing numbers of students are expected to master basic skills (Hallinger & Murphy, 1987).

Jamentz (2002) notes that principals must be able to recognize whether lessons are aligned with standards, develop classroom assessments consistent with standards, and evaluate student work for evidence that standards have been achieved. Hoy & Hoy (2006) state that establishing a climate that promotes academic press has many benefits to the teaching and learning process. Quinn (2002) noted that a qualitative study of eight elementary schools indicated that schools which focus the climate around high expectations, high achievable standards, and an orderly, serious environment, have a positive impact on teacher instruction.

Teachers who work in a school with high academic press are more likely to use a variety of instructional strategies, plan diverse lessons to attend to different learning styles, monitor and

provide feedback on student progress more frequently, collaborate with colleagues, demonstrate collegial behaviour, and attend to their own professional learning (Mohamad Johdi, 2014).

This is a proved that leaders have a deeper and more lasting influence on organizations and provide more comprehensive leadership if their focus extends beyond maintaining high standards.

Providing Incentives for Learning

According to Noddings (1992), schools, like families, are multipurpose institutions. Although academics are the focus of schools, students need adults to care about their personal interests. To meet this need, according to Harris and Lowery (2002), the principal can be accessible to students; reward them; be an advocate for them; and provide them with a safe, secure learning environment.

Hallinger & Murphy (1987) admitted that the principal is a key actor in linking classrooms and school reward systems, ensuring that they are mutually supportive. Principals who are accessible to the students contribute to a positive climate for students. Harris and Lowery (2002) also mentioned that principals who take extra time to praise students for their achievements over the intercom, in the newspaper, or with personal notes and e-mails create a positive school climate.

McEwan (2003) and O'Malley, Voight, Renshaw & Eklund (2015) stated, four job functions constitute the conceptual definitions for the principal variables examined in this study. These definitions will be used to help generate the specific policies, practices, and behaviour that form the questionnaires which will be used to collect data on the practice of Promoting a Positive School Learning Climate of Instructional Leadership among principals of Cluster Secondary Schools Malaysia.

AIM OF THE STUDY

The purpose of this study was to investigate the best practices of promoting a positive school learning climate among principals of Cluster Secondary Schools Malaysia according to principals' and teachers' perceptions towards realization of Education Blueprint 2013-2015.

Research Questions

Research Question 1:

What is the Best Practice of Protecting Instructional Time among Principals of Cluster Secondary Schools Malaysia according to Principals and Teachers Perceptions?

Research Question 2:

What is the Best Practice of Providing Incentives for Teachers among Principals of Cluster Secondary Schools Malaysia according to Principals and Teachers Perceptions?

Research Question 3:

What is Best Practice of Developing and Enforcing Academic Standards among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions?

Research Question 4:

What is the Best Practice of Providing Incentives for Learning among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions?

Research Question 5:

What is the Best Practice of Promoting a Positive School Learning Climate among Principals of Cluster Secondary Schools towards Realization of Education Blueprint 2013-2025 Malaysia?

RESEARCH METHODOLOGY

The Principal Instructional Management Rating Scale (PIMRS) modified by Hallinger and Murphy (1985), Latip (2006), Hatta (2010), Surayya (2016) was used as the data collection instrument through survey questionnaire. The list of cluster secondary schools was acquired from the Ministry of Education Malaysia. There were 871 respondents of different genders, ethnics, type of schools, and, position of responsibilities at schools were participated. The data was analyzed by using the Statistical Package for Social Science (SPSS) version 18. The result of the study was using 5-Likert-Scale that is Key: N = 1-Never; S = 2-Seldom; R =3- Rarely; F = 4-Frequently; A =5- Always (Creswell, 2008). This research was funded by Fundamental Research Grant Scheme (FRGS), Ministry of Education, Malaysia. The distribution and responses to the questionnaire from the management and teachers of cluster secondary schools were extremely encouraging.

DATA ANALYSIS & FINDINGS

The practices of Promoting a Positive School Learning Climate among principals of Cluster Secondary Schools towards realization of Education Blueprint 2013-2025 Malaysia are presented in the following sections respectively.

Research Question 1:**What is the Best Practice of Protecting Instructional Time among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions?**

Table 1 described in detail the frequency, percentage, mean, and, standard deviation of each task involved in the best practice of Protecting Instructional Time among principals of Cluster Secondary Schools Malaysia according to principals' and teachers' perceptions.

Table 1:
Practice of Protecting Instructional Time among Principals of Cluster Secondary Schools Malaysia according to the Principals and Teachers Perceptions (N = 871)

No.	Items	Responses					Mean	Std. Dev.
		N	S	R	F	A		
1.	Instructional time is not interrupted	20 (2.3)	49 (5.6)	218 (25.0)	341 (39.2)	243 (27.9)	3.85	.969
2.	Students are not called to the office during instructional time	31 (3.6)	64 (7.3)	238 (27.3)	357 (41.0)	181 (20.80)	3.68	.997
3.	Truant students suffer specified consequences for missing instructional time	9 (1.0)	63 (7.2)	190 (21.8)	331 (38.0)	278 (31.9)	3.93	.957
4.	Visit classrooms to see that instructional time is used for learning	9 (1.0)	45 (5.2)	203 (23.3)	328 (37.7)	286 (32.8)	3.96	.928
Total							3.855	0.963

Key: N = Never; S = Seldom; R = Rarely; F = Frequently; A = Always

The finding of the study on Table 1 presented that the highest score on Protecting Instructional Time among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions was extracted from item 4 'Visit classrooms to see that instructional time is used for learning' mean 3.96 and standard deviation 0.928. The result was indicated by

286 or 32.8% respondents selected 'Always', 328 or 37.7% respondents selected 'Frequently', 203 or 23.3% respondents selected 'Rarely', 45 or 5.2% respondents selected 'Seldom', and, 9 or 1.0% respondents selected 'Never'.

The second highest score was item 3 'Ensure that truant students suffer specified consequences for missing instructional time' with mean 3.93 and standard deviation 0.957. The finding was proved by 278 or 31.9% respondents selected 'Always', as high as 331 or 38.0% respondents selected 'Frequently', 190 or 21.8% respondents selected 'Rarely', 63 or 7.2% respondents selected 'Seldom', and, 9 or 1.0% respondents 'Never'.

Research Question 2:

What is the Best Practice of Providing Incentives for Teachers among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions?

Table 2 described in detail the frequency, percentage, mean score, and, standard deviation of each task involved in providing incentives for teachers among principals of High Performing Secondary Schools Malaysia according to the principals' and teachers' perceptions.

Table 2:
Practice of Providing Incentives for Teachers among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions (N = 871)

No.	Items	Frequency/ Percentage					Mean	Std. Dev.
		N	S	R	F	A		
5.	Reinforce superior performance by teachers	39 (4.5)	87 (10.0)	218 (25.0)	320 (36.7)	207 (23.8)	3.65	1.082
6.	Compliment teachers for their performance	53 (6.1)	115 (13.2)	218 (25.0)	305 (35.0)	180 (20.7)	3.51	1.137
7.	Acknowledge special performance by teachers in their personnel files	58 (6.7)	124 (14.2)	234 (26.9)	296 (34.0)	159 (18.3)	3.43	1.138
8.	Reward special efforts by teachers with opportunities for professional development	11 (1.3)	92 (10.6)	194 (22.3)	302 (34.7)	272 (31.2)	3.84	1.023
Total							3.607	1.095

Key: N = Never; S = Seldom; R = Rarely; F = Frequently; A = Always

The result of the study on Table 2 identified, the highest score for providing incentives for teachers was extracted from statement 8 'Reward special efforts by teachers with opportunities for professional development e.g. new roles or in-service training' which indicated that 302 respondents (34.7%) selected 'Frequently', as high as 272 respondents (31.2%) selected 'Always', 194 respondents (22.3%) selected 'Rarely', 92 respondents (10.6%) selected 'Seldom', and, only 11 respondents (1.3%) selected 'Never' of a total 871 respondents.

Table 2 presented, the second highest score was item 5 'Reinforce superior performance by teachers in staff meetings, newsletters, or memos' which as high as 320 respondents (36.7%) selected 'Frequently', 207 respondents (23.8%) selected 'Always', 218 respondents (25.0%) selected 'Rarely', 87 respondents (10.0%) selected 'Seldom', and, 39 respondents (4.5%) selected 'Never'.

Research Question 3:

What is the Best Practice of Developing and Enforcing Academic Standards among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions?

Table 3 determined in detail the frequency, percentage, mean score, and, standard deviation of each task involved in Developing and Enforcing Academic Standards among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions.

Table 3:
Practice of Developing and Enforcing Academic Standards among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions (N = 871)

No.	Items	Frequency/ Percentage					Mean	Std. Dev.
		N-1	S-2	R-3	F-4	A-5		
9.	Set high standards for the students who are expected to master important instructional objectives	3 (0.3)	17 (2.0)	165 (18.9)	295 (33.9)	391 (44.9)	4.21	.839
10.	Encourage teachers to start class on time	3 (0.3)	12 (1.4)	109 (12.5)	277 (31.8)	470 (54.0)	4.38	.781
11.	Make known what is expected of students at different grade	2 (0.2)	10 (1.1)	113 (13.0)	304 (34.9)	442 (50.7)	4.35	.764
12.	Enforce a promotion standard requiring mastery of grade-	5 (0.6)	21 (2.4)	163 (18.7)	270 (31.0)	319 (36.6)	4.22	.872
Total							4.290	0.814

The result of the study on Table 3 demonstrated, the highest score in Developing and Enforcing Academic Standards among Principals of Cluster Secondary Schools Malaysia according to Principals and Teachers Perceptions was extracted from item 64 'Encourage teachers to start class on time and teach to the end of the period'. Table 3 indicated, the mean score for item 10 was 4.38 and Standard Deviation 0.781. The score was contributed by 470 respondents (54.0%) selected 'Always', 277 respondents (31.8%) selected 'Frequently', 109 respondents (12.5%) selected 'Rarely', 12 respondents (1.4%) selected 'Seldom', and, only 3 respondents (0.3%) selected 'Never'.

The second highest score displayed on Table 3 was extracted from item 11 'Make known what is expected of students at different grade levels' with mean 4.35 and Standard Deviation 0.764. The result was supported by 442 respondents (50.7%) selected 'Always', 304 respondents (34.9%) selected 'Frequently', 113 respondents (13.0%) selected 'Rarely', 10 respondents (1.1%) selected 'Seldom', and, only 2 respondents (0.2%) selected 'Never'.

Research Question 4:

What is the Best Practice of Providing Incentives for Learning among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions?

Table 4 presented in detail the frequency, percentage, mean score, and, standard deviation of each task involved in Developing and Enforcing Academic Standards among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions.

Table 4:
Practice of Providing Incentives for Learning among Principals of Cluster Secondary Schools Malaysia according to the Principals and Teachers Perceptions (N = 871)

No.	Items	Frequency/ Percentage					Mean	Std. Dev.
		N-1	S-2	R-3	F-4	A-5		
13.	Recognize students who do superior academic work with formal rewards	1 (0.1)	30 (3.4)	133 (15.3)	244 (28.0)	463 (53.2)	4.31	.860
14.	Use assemblies to honor students for their academic work and behavior in classroom	0 (00)	18 (2.1)	105 (12.1)	267 (30.7)	481 (55.2)	4.39	.777
15.	Recognize superior student achievement in the office with their work products	13 (1.5)	68 (7.8)	236 (27.1)	318 (36.5)	236 (27.1)	3.80	.974
16.	Contact parents to communicate improves student performance in school	20 (2.3)	73 (8.4)	245 (28.1)	310 (35.6)	223 (25.6)	3.74	1.006
Total							4.060	0.904

Key: N = 1-Never; S = 2-Seldom; R =3- Rarely; F = 4-Frequently; A =5- Always

The result of the study on Table 4 revealed, the highest score in Providing Incentives for Learning among Principals of Cluster Secondary Schools Malaysia according to the Principals and Teachers Perceptions was extracted from item 14 'Use assemblies to honor students for their academic work and/or behavior in class' with mean 4.39 and Standard Deviation 0.777. This was supported by 481 respondents (55.2%) selected 'Always', 267 respondents (30.7%) selected 'Frequently', 105 respondents (12.1%) selected 'Rarely', 18 respondents (2.1%) selected 'Seldom', and, none or 0% of the respondents selected 'Never'.

Table 4 presented, the second highest score was item 13 'Recognize students who do superior academic work with formal rewards such as an honor roll or mention in the principal's newsletter' with mean 4.31 and Standard Deviation 0.860. This was proven when 463 respondents (53.2%) selected 'Always', 244 respondents (28.0%) selected 'Frequently', 133 respondents (15.3%) selected 'Rarely', 30 respondents (3.4%) selected 'Seldom', and, only 1 respondent (0.1%) selected 'Never'.

Research Question 5:

What is the Best Practice of Promoting a Positive School Learning Climate among Principals of Cluster Secondary Schools Towards Realization of Education Blueprint 2013-2025 Malaysia?

Table 5 shows the Best Practice of Promoting a Positive School Learning Climate among Principals of Cluster Secondary Schools Malaysia.

Table 5:
Practice of Promoting a Positive School Learning Climate
among Principals of Cluster Secondary Schools Malaysia (N=871)

Functions	Mean	Standard Deviation	Practice	Rank
Protecting Instructional Time	3.855	0.963	High	3
Providing Incentives for Teachers	3.607	1.095	High	4
Developing and Enforcing Academic Standards	4.290	0.814	Very High	1
Providing Incentives for Learning	4.060	0.904	Very High	2
Total	3.953	0.944	High	

Key: N = 1-Never; S = 2-Seldom; R =3- Rarely; F = 4-Frequently; A =5- Always

Practice: Low = 1.00-1.99; Simple High 2.00–2.99; High = 3.00-3.99; Very High = 4.00- 5.00.

Table 5 indicates, the best practice of Promoting a Positive School Learning Climate among Principals of Cluster Secondary Schools Malaysia was on dimension 'Developing and Enforcing Academic Standards' mean 4.226 and standard deviation 0.840, implemented at a 'Very High' level. It was respectively followed by dimensions 'Providing Incentives for Learning' mean 4.060 and standard deviation 0.904 which was implemented at a 'Very High' level, 'Protecting Instructional Time' mean 3.788 and standard deviation that was implemented at a 'High' level, and, finally 'Providing Incentives for Teachers' mean 3.607 and standard deviation 1.095, implemented at a 'High' level.

SUMMARY AND DISCUSSION

Best Practice of Promoting a Positive School Learning Climate among Principals of Cluster Secondary Schools Towards Realization of Education Blueprint 2013-2025 Malaysia.

The study demonstrated that the best practice of Promoting a Positive School Learning Climate among Principals of Cluster Secondary Schools Malaysia according to Principals' and Teachers' Perceptions was on dimension 'Developing and Enforcing Academic Standards' mean 4.226 and standard deviation 0.840.

The 'Very High' practice of dimension 'Developing and Enforcing Academic Standards' was significant to the realization of 'System Aspiration' stipulated in the Education Blueprint 2013 – 2025. There are five outcomes that this Blueprint aspires to for the Malaysian education system as a whole namely access, quality, equity, unity, and efficiency. The 'Very High' practice of excellent secondary schools' principals on Item 9 'Set high standards for the percentage of students who are expected to master important instructional objectives' mean 4.21 and standard deviation 0.839 was significant to realize the Blueprint 'quality' aspiration of 'All children will have the opportunity to attain an excellent education that is uniquely Malaysian and comparable to the best international systems'.

Another 'Very High' practice of Cluster secondary schools' principals on item 11 'Make known what is expected of students at different grade levels' mean 4.35 and standard deviation 0.764 was prominently congruent to the Blueprint 'equity' aspiration of 'Top-performing school systems deliver the best possible education for every child, regardless of geography, gender, or socioeconomic background. The Ministry aspires to halve the current urban-rural, socio-economic, and gender achievement gaps by 2020'.

The principals of Cluster secondary schools 'Very High' practice on item 10 'Encourage teachers to start class on time and teach to the end of the period' mean 4.38 and standard deviation 0.781 really significant to achieve the Blueprint 'unity' aspiration 'As students spend over a quarter of their time in school from the ages of 7 to 17, schools are in a key position to

foster unity. Through interacting with individuals from a range of socioeconomic, religious, and ethnic backgrounds—and learning to understand, accept and embrace differences—a shared set of experiences and aspirations for Malaysia’s future can be built. The Ministry aspires to create a system where students have opportunities to build these shared experiences and aspirations that form the foundation for unity’.

The Best Practice of Providing Incentives for Learning among Principals of Cluster Secondary Schools Malaysia according to the Principals and Teachers Perceptions achieved mean 4.060 and standard deviation 0.904. This ‘Very High’ level practice of principals was significant factor to realize the Blueprint Student Aspirations that beyond these system-wide outcomes, stakeholders were also very clear on what ‘quality’ should be at the individual level. In a nutshell, educators, parents, students, and other members of the public were united in a vision of education as a vehicle for the holistic development of children—intellectually, spiritually, emotionally, and physically. This is the same vision that has underscored all education improvement efforts since the National Education Philosophy for Malaysia was written in 1988 (Mohamad Johdi, 2014).

Looking ahead, the Blueprint will continue to use the National Education Philosophy’s vision of a balanced education as its foundation for individual student aspirations. It has also drawn on learning from other high-performing systems to develop a refined articulation of the specific skills and attributes that students would need to thrive in tomorrow’s economy and globalised world. (Ministry of Education Malaysia, 2012).

The above dimension was supported by the principals ‘Very High’ practice on item 13 ‘Recognize students who do superior academic work with formal rewards such as an honor roll or mention in the principal’s newsletter’ mean 4.31 and standard deviation 0.860. Another contribution of the realization was principals’ ‘Very High’ practices on item 14 ‘Use assemblies to honor students for their academic work and/or behavior in class’ mean 4.39 and standard deviation 0.777. Consequently, both items are significant to the Blueprint Student Aspiration on ‘access’ that ‘Every child in Malaysia deserves equal access to an education that will enable that child to achieve his or her potential. The Ministry thus aspires to ensure universal access and full enrolment of all children from preschool through to upper secondary school level Form 5 by 2020.

The study suggest that the very high practice of principals of excellent secondary schools are significant factor to realize the Blueprint Student aspiration in Knowledge, Thinking Skills, Leadership skills, Bilingual Proficiency, Ethics and Spirituality, and, National identity. The findings were prominently relevant and significant to realize the Ministry of Education 11 shifts which require the most urgent attention. Some of these shifts represent a change in strategy, direction and represent a move away from current practices (Ministry of Education, Malaysia, 2012).

Collectively, these aspirations and shifts address every stakeholder and the main concerns of the public. The Ministry hopes that this inclusiveness will provide the basis for a common focus that can be embraced by all Malaysians.

CONCLUSION

In fact, the most important and the most difficult job of an instructional leader is to change the prevailing culture of a school. A school’s culture has far more influence on life and learning in the schoolhouse than the president of the country, the state department of education, the superintendent, the school board, or even the principal, teachers, and parents can ever have.

One cannot, of course, change a school culture alone. But one can provide forms of leadership that invite others to join as observers of the old and architects of the new. Meanwhile, the principal must ensure all the elements within school, especially something which challenges the teaching and learning process.

It is hoped that this study provides useful findings which will effectively assist the process of promoting a positive school learning climate among principals and teachers of secondary schools in Malaysia. Consequently, facilitate and improve students' academic performance in achieving the first class human capital compatibly excellent nationally and internationally as stipulated in National Philosophy of Education, Vision 2020 and aspiration of the Malaysia Education Development Plan 2013-2025.

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Leapfrog Technologies: Can Mobile Technologies Compete Successfully With Traditional Learning Management Systems?

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ABSTRACT

The objective of this paper was to create an ontology to demonstrate new approaches to study and understand mobile learning through the use of WhatsApp Messenger as a learning tool in a distance learning program. The goal was to add to the body of research and further study how mobile learning can help to remedy the limitations online learning poses for students who live in the sub-Saharan Africa Region with lack of access to electrical power and internet connectivity issues. Qualitative approach was employed with a total sample size of 807 students, composed of 58 percent male and 42 percent female. In designing the blended mobile learning structure, I applied agile methodologies using WhatsApp Messenger as a learning platform, that meets the current infrastructural conditions in Ghana. In this study, I made several assertions that, for WhatsApp to work properly in any classroom in Ghana, there must be intentional designs and step-by-step approach to teach both the faculty and the students how to use the application to achieve the utmost outcomes.

Key words: Blended m-Learning, Connectivity, Mobile-Learning, WhatsApp Messenger

INTRODUCTION

Prior to the advent of mobile phones, many sub-Saharan African countries whose citizens lived in the most remote parts of the country were cut-off regarding the use of telephones, powered by landlines to connect to the global world. However, the abundance of the mobile network systems has changed the face of telecommunication and has transformed the way business is transacted in sub-Saharan Africa and the rest of the developing world. Citizens are able to skip the landline developmental stage of telecommunication to digitalization. Mobile technologies with cellular connectivity continue to dominate the information communication technology market in sub-Saharan Africa. According to the Pew Research Center (2015), cell phone usage in Africa pales in comparison to that of developed countries like the United States of America. However, there has been a dramatic surge in the growth of smartphone usage in sub-Saharan Africa. As of 2014, the following countries recorded high percentages of cell phone usage; Uganda 65%, Tanzania 73%, Kenya 82%, Ghana 83%, and South Africa, 89%. In the same year, the United States' cell phone usage was 89%, the same as in South Africa and only in single-digits, higher than Ghana and Kenya. Among the many usages of cell phones in Africa for a twelve-month period, texting was the most commonly used of cell phones (see fig. 1).

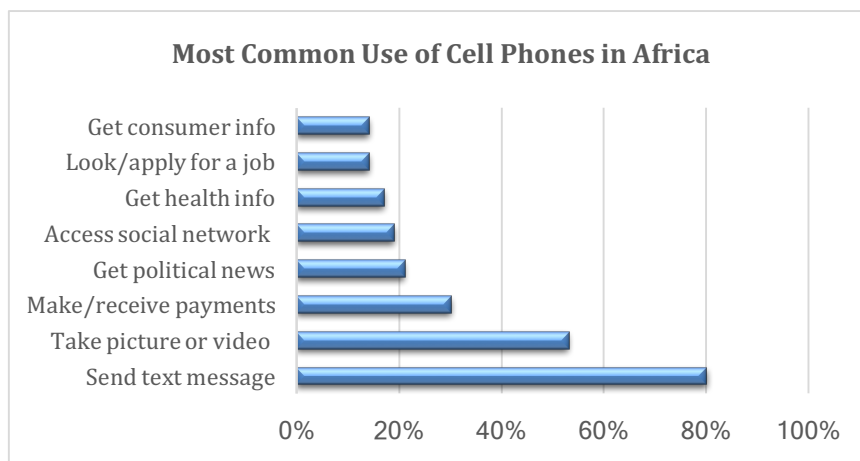


Figure 1: Pew Research Center: Spring 2014 Global Attitudes survey. Q74a-h

The evolution of the Third Generation Web (Web 3.0) and smartphone applications which have been created to run on mobile devices of the 21st Century have transformed the entire universe in all areas, including the way we communicate, function, in our daily living, and even the way we study. Almost every corner of the universe, including developing countries such as, sub-Saharan Africa, South Asia, and South America, use these technologies for transactional purposes. Farmers use these applications (apps) to transact farm businesses; communities use them to preserve family traditions and memories; and business executives are able to bridge transactional gaps. Meanwhile, researchers acquire access to research artifacts through Mobile Apps, and teachers engage their students in the classrooms using these innovative technologies. Mobile technologies have enabled learning in multiple ways, “people can use mobile devices to access educational resources, connect with others, or create content, both inside and outside classrooms. Mobile learning also encompasses efforts to support broad educational goals such as the effective administration of school systems and improved communication between schools and families” (UNESCO, 2013 p. 6).

Quin (2001) define mobile learning as learning that is done through mobile computational devices, such as “Palms, Windows CE machines, even your digital cell phone.” UNESCO has compiled many unique benefits of mobile learning. Among the list are:

1. **Reach and equity of education.** Mobile technologies provide an excellent medium for extending educational opportunities to learners who may not have access to high-quality schooling; they are common even in areas where schools, books and computers are scarce; as the price of mobile phone ownership also continues to decline.
2. **Personalized learning.** Mobile phones are owned by their users and are carried throughout the day; learners can carry their mobile devices to and from work, school, bedroom, boardroom, and to recreational venues; they are relatively inexpensive; desktop and laptop computers are not portable. Mobile phone and digital devices, by virtue of being highly portable and relatively inexpensive, have expanded the potential and practicability of personalized learning.
3. **Provides immediate feedback and assessment.** Mobile technologies can streamline assessments and provide learners and teachers more immediate indicators of progress; provide instant feedback; this allows learners to quickly pinpoint problems of understanding and review explanations of key concepts. Mobile applications make it easy for teachers to administer short quizzes to ensure that learners completed a given reading assignment.
4. **Productive use of time spent in classroom.** When learners utilize mobile technology to complete passive or rote tasks such as listening to a lecture or memorizing information at home, they have more time to discuss ideas, share alternative

interpretations, work collaboratively, and participate in laboratory activities at school and other learning centers.

5. **Build new communities of learners.** Mobile devices are used to create communities of learners where they did not exist before. Women network to assist people in their local communities; focused job training to students with similar vocational interests; students pose and answer questions, complete collaborative projects, and engage in the social interactions foundational to learning.
6. **Support situated learning.** Mobile devices can move learning to settings that maximize understanding. Just as museums regularly offer 'audio guides' that allow visitors to learn about particular artefacts or works of art while viewing them in three dimensions, pioneering developers have made similar 'site-specific' mobile applications to facilitate learning in disciplines as varied as history and chemistry. Mobile devices can, in essence, give literal meaning to the maxim 'the world is a classroom.'
7. **Enhance seamless learning.** Cloud computing and storage provide students continuous and up-to-date learning experiences regardless of the hardware they use to access content. Because educational resources and information about a learner's progress are stored on remote servers rather than on the hard drive of a single device, students can access similar material from a wide variety of devices (including desktop computers, laptops, tablets and mobile phones), utilizing the comparative advantages of each.
8. **Bridge formal and informal learning.** Mobile devices facilitate learning by blurring boundaries between formal and informal education. Using a mobile device, students can easily access supplementary materials in order to clarify ideas introduced by a classroom instructor.
9. **Minimize educational disruption in conflict and disaster areas.** Mobile infrastructure is generally easier and quicker to repair following a disaster or conflict. Mobile learning holds special application for learners living in post-crisis areas.
10. **Assist learners with disabilities.** Mobile devices can dramatically improve the learning of students with physical disabilities, in resource-poor and resource-rich communities alike through text-enlargement, voice-transcription, location-aware and text-to-speech technologies.
11. **Improve communication and administration.** Mobile devices are generally faster, more reliable, cheaper, and more efficient than alternative forms of communication. Learners and educators are increasingly using them to facilitate the exchange of information. In addition, a number of projects active in Asia, Africa and North America rely on mobile phones to streamline communication between classroom instructors who teach similar disciplines or groups of students.
12. **Maximize cost-efficiency.** Many governments have successfully expanded educational opportunities by leveraging the technology people already own, rather than providing new devices. Initiatives that transform ubiquitous mobile devices into tools for learning, while ensuring equity of opportunity for students who cannot afford them, generally provide affordable solutions to educational challenges (UNESCO, 2013, p. 10-26).

M-learning is a subset of e-learning, which is a subset of distance learning, and distance learning is a subset of flexible learning. According to Brown (2003), flexible learning is divided into distance learning and contact learning (see figure 2).

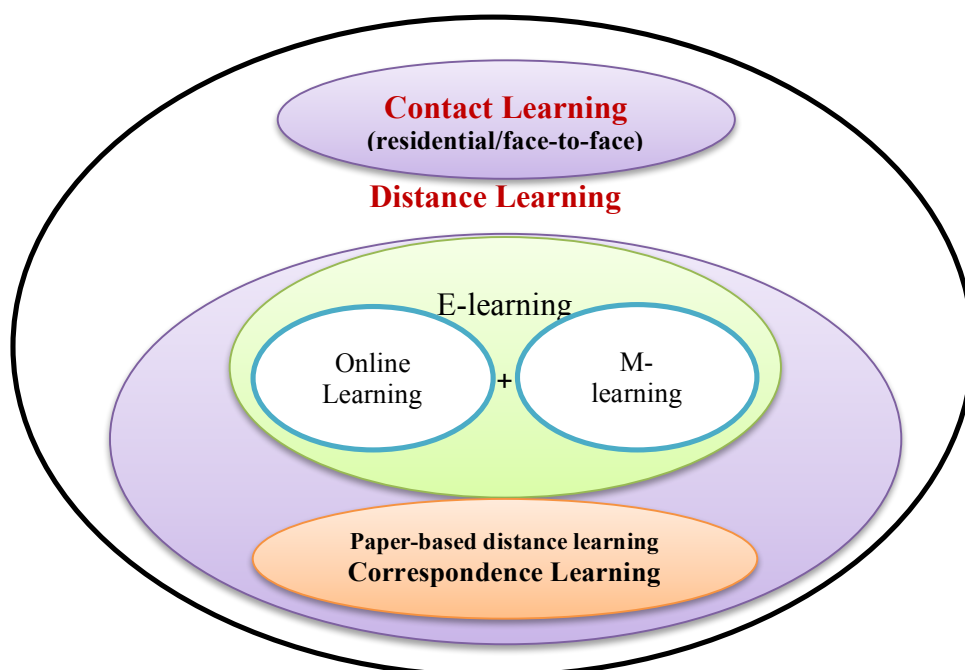


Figure 2: Flexible Learning = (Contact Learning + Distance Learning): Adopted from T. H. Brown, 2003. The subset of flexible learning.

Shearer (2011) posited that, the “m” for mobile learning stands for “on the move.” When the “learning” is added, it becomes “knowledge on the move.” That is, electronic devices that are portable, always on, and can access the Web anytime and anywhere (Tella, 2003). The idea of mobile learning is narrower and focused on the use of smartphones or tablets. “Taking this narrower view allows us to focus on what we can provide learners in a just-in-time type of experience to supplement their courses” (p., 5).

RELATED WORK

The objective of this paper was to create an ontology to demonstrate new approaches to study and understand mobile learning through the use of WhatsApp Messenger as a learning tool in a distance learning program. The goal was to add to the body of research and further study how mobile learning can help to remedy the limitations online learning poses for students who live in sub-Saharan Africa with lack of access to electrical power and internet connectivity issues. Motlik (2008) suggested that, mobile learning will pave the way for online learning as the internet is not stable and is unavailable in many parts of rural areas in developing nations. Also mobile learning is more affordable to less developed nations and financially constrained groups (Gronlund & Islam, 2010).

Notwithstanding these positive developments, some, including academics in higher education in sub-Saharan Africa, refuse to accept the fact that online learning can be done through mobile devices. They still believe that because of the unstableness of Internet connectivity, few institutions of formal learning can successfully go online in sub-Saharan Africa, including Ghana (Yeboah & Ewur, 2014). However, with mobile learning technologies like “WhatsApp Messenger,” developing countries have no excuses as to why they are not able to adopt online learning in the remotest parts of the country where connectivity is a major setback. Everywhere a mobile phone is used, whether for WhatsApp, Email, SMS, video or photo sharing, online learning is possible. In the academic environments, just as in the community, households and business places, WhatsApp Messenger has been used to create group chats for work teams, social networking, and learning.

In Ghana, the most common format adopted in Distance Learning is the tutorial format, where very few online interactions occur; in most instances, there are no online interactions. The universities that enroll their students through the distance learning mode, rely heavily on print materials in the form of course modules and students meet regularly during weekends in tutorial centers throughout the nation where they receive face-to-face instructions. Very few programs include videos and voice presentations in their distance learning pedagogy (Larkai, Ankomah-Asare, & Nsowah-Nuamah, 2016; Yeboah & Ewur, 2014).

WhatsApp Messenger for m-Learning

Research on the application of WhatsApp Messenger in the classroom is new and developing, however, its usage as a social media tool on smartphones is widespread (Cetinkaya, 2017; Bouhnik & Deshen, 2014; Yeboah & Ewur, 2014; Church & de-Oliviera, 2013). WhatsApp is the most popular mobile messaging application widely used worldwide and is ranked as the number one in terms of monthly active users, based on a study of over 22,500 sources worldwide (Statista, 2018).

WhatsApp features include;

- Text – simple and reliable;
- Group Chat – keeping in touch with love ones, people in your network, business partners, and parishioners;
- On the Web and Desktop – keeping the conversation going anytime, anyplace, anywhere;
- Voice and Video Calls – free face-to-face conversation, when voice and text are not enough;
- End-to-End Encryption – provides security by default;
- Photos and Videos – opportunity to share moments that matter;
- Voice Messaging – using the voice messaging system to convey emotional moments; and
- Documents – attaching and sharing documents including PDFs, spreadsheets, slideshows, photos, and Word documents (<http://www.whatsapp.com/features/>).

WhatsApp Messenger features make it easy for teaching and learning. The app uses phone internet connections (4G/3G/2G/EDGE or Wi-Fi) of users to send and receive messages. That is, as long as there is data on users' phones, sending and receiving messages are free. (<https://faq.whatsapp.com/en/android/20965922/>). WhatsApp announced in May 2018 at its F8 developer conference in San Jose, California, that over 65 billion messages have been sent by users with more than 2 billion minutes of voice and video calls made everyday on the app platform, and about 1 billion people uses this messaging app each day (Al-Heeti, 2018). Though few studies have researched into the educational benefits of the WhatsApp Messenger platform; students at the university level have used the texting feature to send and receive short messages through mobile devices; institutions of higher learning are gradually adopting WhatsApp for educational purposes; and discussion forums that are prominent in Learning Management Systems (LMS) are also available on some mobile learning platforms such as WhatsApp Messenger (Chan, 2005; Johnson, 2007, Smith, Salaway, & Caruso, 2009).

Key Players of the Ontology

Factors that plague online learners in Ghana are many, including; computer illiteracy, access, long-term power outages, and connectivity. Relevant skills deficiency hinders successful facilitation of online learning through discussion boards, timely response to students, and promotion of active learning strategies. "Online instructors specifically need to be able to facilitate online discussions that are rich and meaningful, respond in a timely manner, and

model active learning strategies” (Burns, 2011 p. 87). However, universities in Ghana lack the appropriate infrastructure to offer courses online, thereby resorting to face-to-face tutorial sessions in the form of tutorial center operations throughout the country by using untrained tutors who have little or no experience in distance learning. Students who are enrolled in the distance learning programs have to attend tutorials every weekend or bi-weekly.

According to Kent Löfgren’s (2013) introduction to the word and the concept of ontology, the word ontology is used in two different contexts; philosophical and non-philosophical. At the philosophical context, the word is used to study what is real and what exist. However, at the non-philosophical context, Löfgren explained that the word is used more narrowly to describe what exists within a determined field. He further posited that, under the non-philosophical context, researchers focus on identifying important key players in a particular field and investigate the inter-relationships that brings them together (Carson, Gilmore, Perry, & Gronhaug, 2001; Barry, 1992; Löfgren, 2013). For example, an effective distance learning program requires inter-relationships among key players. This section identifies four important key players, which include: students, faculty, support staff, and administrators (Barry, 1992):

Students’ engagement in an online learning has taken a new shape. Brian Kathman (2017) posited that, higher education institutions are engaging students more and more through text messaging and fostering of one-to-one relationships. In the past, distance learning students were not as able to freely interact with each other to share their backgrounds and interests. However, new technologies are bringing students together and helping to build communities of learners through distance education (Barry, 1992, pp. 30-32).

The success of an effective distance education program depends on the **faculty**. Bernard Bull (2013), list eight roles of an effective online teacher as follows;

- a) **The tour guide** – “the teacher directs and redirects the attention of learners toward key concepts and ideas. A good tour guide doesn’t want anyone to miss out on the highlights of the tour;”
- b) **The cheerleader** – “at times, learners may fall into negative comments about themselves, the class, or their classmates. The cheerleader strives to find ways to listen, respect the learner’s frustrations, but to also help them reframe the situation in ways that are more positive and productive;”
- c) **Learning coach** – a skilful teacher “moves beyond simply modelling a love for the subject and personal skill with the content. Instead, finds ways to hand the subject over to the students to do something with it;”
- d) **Individual and group mirror** – just like looking into the mirror in the morning to see what is sticking out on you, “learners need this same sort of feedback about their work. How are they doing? Are they getting closer to meeting the learning objectives or not? The effective online teacher finds ways to give this sort of feedback to individual learners and, when appropriate, groups of learners;”
- e) **Social butterfly** – “the online teacher must serve like a great party host, facilitating introductions, using discussion starters to facilitate conversations among students, and taking the time to get to know students and referencing that knowledge in interactions with them;”
- f) **Big brother** – like a spy of a sort; “the teacher can tell when and how many times a student logs into the course, what pages were viewed or not, how many discussions posts the student contributed, and much more.” That is, “if a student is not logging in, then contact the student. If students are failing to visit pages in the course with key instructions, point that out to the students or reorganize the content so that it’s easier to find;”

- g) **Valve control** – “the teacher as valve control intentionally releases content in chunks that are appropriate for students. Sometimes this comes in the form of only releasing content one week at a time. Other times, the teacher releases it all at once, but directs students to only focus on certain parts at a time;”
- h) **Co-learner** – “great teachers are lifelong learners, and they can model that learning for their students in a variety of ways in the online classroom. The teacher can be an active (but not too active or it will silence students) participant in online discussions, sharing what they are learning about the subject, and even complete all or parts of some assignments, sharing their work with the students” (www.facultyfocus.com).

Barry Willis (1992) described the **support staff** as “silent heroes of a successful distance education program” (p. 37). The support staff assist in promoting persistence and participation to avoid students’ dropout. Their services include academic, administrative, and technological support. In most institutions, the support staffs’ services are offered through extended hours (Moisey & Hughes, 2008).

Administrators are entrusted to ensure that a strategic plan is in place that promotes effective teaching and learning. Their duties include, planning for technological resources, deploying manpower resources, financial and the necessary capital expenditures to enhance the institution's online learning mission. They also “lead and inspire faculty and staff in overcoming obstacles that arise. Most importantly, they maintain an academic focus, realizing that meeting the instructional needs of distant students is their ultimate responsibility” (Barry, 1992, p. 38).

METHODOLOGY

This paper used qualitative approach, framed under the paradigm which postulates that reality is relative and depends on multiple systems for meaning. *On-to-logy*, a Greek word, relates to the nature of reality as seen in the lens of a person in his experiences, this experience may lead the individual to seek meaning. There are two schools of thoughts: the objectivist and subjectivist. The objectivist approach correlates with a quantitative research paradigm, while the subjectivist approach sees the world as socially constructed – a qualitative paradigm (Hudson & Ozanne, 1988; Lincoln & Guba, 1985; Neuman, 2000).

Qualitative ontological researchers believe that the researcher and the researched are not mutually exclusive and that the context, background, cultural setting, and values of the researcher can influence the observation. Qualitative researchers seek to create theory and new meaning in specific settings, while quantitative researchers test objective theories as they do examine the relationship between and among variables. In a qualitative study, the researcher observes why events occur and what those events mean to the population being studied (Bogdan & Biklen, 2006; Corbin & Strauss, 2008; Creswell, 2014).

In a typical university distance learning classroom in Ghana; there are students who come directly from the Senior High Schools (17 to 21 year olds); Top-up students (21 – 27 year olds) coming from the nation’s Polytechnics, Colleges of Education, and diploma (or associate) degree programs who enrol into the universities for degree purposes; mature students who are permitted to enrol into university degree programs after attaining the age of 25 (25 – 40 year olds); and similar age groups who are workers and are seeking university degrees for professional advancements. A vast majority of these students live in the nation’s hinterlands and are not able to take full advantage of online learning due to factors beyond their control.

This paper describes an ongoing research study, which began in January 2017, about how to create an effective distance learning program in a hybrid mode that integrates WhatsApp Messenger as the learning platform for students who live in Ghana's remote areas where connectivity and electrical power supply are limited. The purpose was to better understand the application of WhatsApp Messenger by using its features to construct meaning for learners and instructors in an online learning context. The study was based in a university in Ghana with three campuses and two learning centers with total student population of about 10,000. A sampled total of 807 students from three campuses and two learning centres of the university adopted the use of WhatsApp Messenger in a blended online learning mode.

Practical Applications of the Ontology

The applications of the ontologies for this paper ranged from identifying multiple factors that hindered these key players, to successfully engaging in online learning at the tertiary education level. Online learning is increasingly gaining popularity in higher educational institutions in the world, including developing countries, like Ghana. Notwithstanding its popularity, the fact that online learning must be done using recent technologies and internet connectivity all require some basic computing skills, information communication technology (ICT) skills, and internet access.

The Sloan Consortium (2008), classified online learning as follows: 0% = Traditional – where course uses no online technology and content is delivered in writing, oral, or audiovisual format; 1-29% = Web-facilitated – course uses Web-based technology to facilitate what is essentially a face-to-face course and might use learning management system (LMS) to post the syllabus and assignments; 30-79% = Blended/hybrid – course blends online and face-to-face settings, a substantial proportion of the content is delivered online, and the course typically uses online discussions, but also includes some face-to-face meetings; 80-100% = Online – course delivers the vast bulk of content online, and course typically has no face-to-face meetings.

Table 1 classifies online learning into different categories: traditional classroom learning, web-facilitated, blended or hybrid, and fully online. The format adopted for the study was blended or hybrid online learning.

Table 1: Classification of Blended Online Learning

Category	Definition	Applicable to Current Research Context
Course-Level Definitions		
Classroom Course	Course activity is organized around scheduled class meetings. No online sessions, only face-to-face meetings.	Regular Mode
Synchronous Distributed Course	Web-based technologies are used to extend classroom lectures and other activities to students at remote sites in real time.	N/A in current research context
Web-Enhanced Course	Online course activity complements class sessions without reducing the number of required class meetings.	N/A in current research context
Blended/Hybrid Classroom Course	Online activity is mixed with classroom meetings, replacing a significant percentage, but not all required face-to-face instructional activities.	Students meet four times for face-to-face tutorials with their instructors in a 10-week Session. Hybrid mode.
Blended/Hybrid Online Course	Most course activity is done online, but there are some required face-to-face instructional activities, such as lectures, discussions, labs, or other in-person learning activities.	Students meet four times for face-to-face tutorials with their instructors in a 10-week Session. Hybrid mode. There are two-weekend meeting for proctored final examinations.
Online Course	All course activity is done online; there are no required face-to-face sessions within the course and no requirements for on-campus activity.	N/A in current research context

Source: Online Learning Consortium. Sener (2015).

ANALYSIS OF THE ONTOLOGY

Table 2 consists of demographic characteristics of the sample participants in the study. Total sample size for the study was 807, composed of 58 percent males and 42 percent females. Students above the age of 25 formed the dominant age group for the study, scoring a total of 83 percent. Sixty percent of the students were married with about 44 percent indicating that about 4 persons depend on them for their sustenance. About 51 percent of the students indicated that they entered the university with other qualifications apart from associate degree or high school diploma. Concerning commitment to study, about 89 percent of the students indicated that they work, while about 54 percent of them were engaged in full time employment. Forty-three percent of the students in the study were committed to study for about ten hours a week.

Table 2: Characteristics of Participants: Mobile Learning Survey Results

	Campus 1	Campus 2	Campus 3	Centre 1	Centre 2	Total %	Total Students
<u>Demographics</u>							
Number of Students	289	257	52	155	54	0	807
<u>Gender</u>							
Male	52.4	58	61	62	57	58.08	469
Female	47.6	42	39	38	43	41.92	338
<u>Age Group</u>							
15-19	2	8	1	0	2	2.6	21
20-24	9	17	14	15	16	14.2	115
>25	89	75	85	85	82	83.2	671
<u>Marital Status</u>							
Married	58	53	52	77	61	60.2	486
Not Married	42	47	48	23	39	39.8	321
<u>Class Standing</u>							
Freshmen (Level 100)	45	33	31	35	28	34.4	278
Sophomore (Level 200)	12	30	25	15	32	22.8	184
Junior (Level 300)	21	24	24	15	25	21.8	176
Senior (Level 400)	22	13	20	35	15	21	169
<u>Entry Qualification</u>							
Associate Degree (HND*)	42	27	30	45	29	34.6	279
High School Certificate	15	13	18	17	11	14.8	119
Other**	43	60	52	38	60	50.6	408
<u>Time Commitment</u>							
<u>Dependents***</u>							
1	26	40	35	38	33	34.4	278
2-4	57	38	38	42	45	44	355
>5	17	22	27	20	22	21.6	174
<u>Work</u>							
Yes	91	89	92	88	85	89	718
No	9	11	8	12	15	11	89
<u>Hours Worked/Week</u>							
<20	13	4	10	15	7	9.8	79
20-30	38	32	38	32	40	36	291
30-40	42	57	42	43	35	43.8	353
>40	7	7	10	10	18	10.4	84
<u>Hours Allocated for Learning</u>							
<2	2	20	5	8	10	9	73
2-4	8	11	30	20	49	23.6	190
5-10	50	53	41	42	28	42.8	345
11-20	40	16	24	30	13	24.6	199

*HND – Higher National Diploma is equal to a two-year Associate Degree. These students are enrolled into the BA/BS program as “top-up students.

**Other – students who enroll into the program through the Mature Entrance route. Students must be 25-years old before they qualify

***Dependents – means a spouse of a student/children/parents that are directly supported by the students/ and any other qualified dependent

Blended Mobile Learning Structure

I present in Table 3, a mobile learning structure indicating a summary comparison between a typical Learning Management System (LMS) and the proper application of the use of WhatsApp as mobile learning platform in a Ghanaian context.

The following assumptions were made to explain table 3:

Assumption # 1

Why it will not work

- a) WhatsApp Messenger as a social media tool is not fit for the classroom – for learning purposes.
- b) A typical LMS delivers courseware over the internet – lack of internet connectivity and prolonged power outages in Ghana, especially, in the countryside makes it impossible to sustain online learning. Therefore, LMS will not work for students in Ghana who live far away from the cities.

Assumption # 2

How it will work

- a) For WhatsApp to function properly in online learning environment, the features must be properly integrated to fit the purpose of teaching and learning in a mobile learning context.
- b) WhatsApp Messenger uses phone internet connections of users to send and receive messages. That is, as long as there is data on users' phones, sending and receiving messages are free. Therefore, students in Ghana, who live far away from the cities can also access online learning benefits through their mobile devices.

Jurado, Pattersson, Regueiro-Gomez, and Scheja, (2014), classified learning management systems features into four different tool groups, namely: distribution, communication, interaction, and administration.

1. **Tools for distribution** allow lecturers to upload documents, available to students. Earlier it was mainly text documents and today it may also be different kinds of media files. Nevertheless, the process is still one-way, that is, teacher-to-learner distribution of information.
2. **Tools for communication** allow information to go either way as well as from student-to-student. The most common example is E-mail.
3. **Tools for interaction** call for reaction and feedback. Discussion boards are the most typical example. These tools are of great interest since they may promote student activity and cooperation, hence enhancing the learning experience.
4. **Tools for course administration** are used to monitor and document the educational process, rather than to facilitate teaching or learning (p.4).

Table 3. Mobile Learning Structure Using WhatsApp Messenger – Ghanaian Context

Application: Online learning tools. Jurado, et al., (2014)	Key Players: Students/faculty/support staff/administrators	Purpose: Teaching and learning using blended mode of online learning	Learning Management System (LMS): Why LMS will not work in Ghana due to lack of Internet Access	WhatsApp Messenger for Learning: How WhatsApp will work despite lack of Internet Access in Ghana
Distribution	1. Faculty 2. Student Interaction flows from teacher to student	One-way: from teacher to student – one way process	1. Teacher sends course information to students via the course management system 2. Students retrieve course information 3. LMS delivers courseware over the internet 4. Students lack access to retrieve and view course content via the internet.	1. Teacher sends course information via PDFs or Word document attachments to students 2. Students sign their name (forum signature) before each WhatsApp post; 3. Students retrieve course information 4. WhatsApp Messenger uses phone internet connections 5. As long as there is data on students' phones, viewing course content is possible.
Communication	1. Faculty 2. Student Interaction flows both ways	Information go either way. Teacher to student, student to teacher	1. Students respond to teacher via the course management system 2. Teacher grades students work and post comments on course management system	1. Students post completed assignments in more than one format via: a. PDF or Word attachments b. Direct text message 2. Teacher grades students work and post comments via WhatsApp Messenger 3. Teacher sends transcripts of WhatsApp communication to course administrators.
Interaction	1. Students Peer interactions. Student to student	Discussion boards, students reactions and feedbacks.	1. Student to student interaction through LMS discussion forums 2. Teacher as facilitator guides students	1. Students to student interaction through: a. WhatsApp 'group-chat' b. Possible video and voice calls 2. Teacher as facilitator guides students
Course Administration	1. Support Staff 2. Administrators Back-end interaction	Course monitoring, management, documentation, and evaluation.	1. Teacher setup the courses via the LMS 2. Teacher post course syllabus and assignments for class discussions 3. Teacher grades students work and post grades online 4. Students perform teacher and course evaluations online	1. Support staffs create WhatsApp groups for students and faculty 2. Support staff monitors students and faculty interactions through WhatsApp transcripts 3. Support staff receives transcripts from teachers regularly and monitors for course content and interactions 4. Teacher sends WhatsApp transcripts to program office for archival purposes. 5. Support staff archives course materials for quality control purposes.

Table 4 describes how students preferred the use of the WhatsApp Messenger in a blended mobile learning due to ease of use, convenience, cost, and accessibility.

Table 4: Results from Selected Campuses/Centre Surveys: Social Media and Mobile Learning

SURVEY QUESTIONS	CAMPUSES/CENTRES*			MOSTLY CHECKED ITEM
	Campus 1	Campus 2	Centre 1	
1. Which communication method do you prefer for social and business networking? Please check all that apply.	Phone calls; WhatsApp; Email	Phone calls; WhatsApp; Email	Phone calls; WhatsApp; Email	Phone calls; WhatsApp; Email; and Facebook
1. Do you own a computer with an internet connection?	58% = Yes	54% = Yes	57% = Yes	About 56% answered Yes
2. Do you own a mobile phone?	100% = Yes	100% = Yes	100% = Yes	Everyone answered Yes
3. How often do you have your mobile phone with you?	100% = Always	100% = Always	66% = Always 34% = Sometimes	Students keep phones Always
4. Do you have internet access through a Wi-Fi connection on your mobile phone?	8% = Yes	5% = Yes	2% = Yes	About 5% have Wi-Fi Connections
5. Do you have internet access through a cellular network on your mobile phone?	100% = Yes	98% = Yes	94% = Yes	Students have access thru Cellular network
6. Which activities do you most often engage in on your mobile phone? Please check all that apply.	Phone calls; WhatsApp; Facebook	Phone calls; WhatsApp; Facebook	Phone calls; WhatsApp; Facebook	Phone calls; WhatsApp; Facebook; Email
7. Would you be comfortable allowing your lecturer to contact you through your mobile phone?	100% = Yes	95% = Yes	100% = Yes	Students will Allow lecturer contact thru cell phones
8. Would you be comfortable receiving your grade report through text messaging?	100% = Yes	98% = Yes	68% = Yes	Students are ok receiving grade report thru text
9. Would you agree that having course materials such as lecture notes, practice quizzes, videos, and PowerPoints available on your mobile phone would be beneficial to your study process?	100% = Agree	90% = Agree	100% = Yes	Students prefer course materials available thru mobile phones
10. Would you be willing to purchase a new mobile device if you thought it would improve your performance at school?	87% = Yes	90% = Yes	80% = Yes	Students willing to purchase mobile device for learning
11. Would you agree that the use of some kind of mobile learning software would improve overall success in your courses?	100% = Yes	95% = Yes	82% = Yes	Student willing to adopt Moodle LMS

*(Selected Campuses/Centre with more than 100 students)

When the question was asked about students' willingness to purchase a new mobile device if they thought it would improve their performance at school; 87 percent indicated "yes." All the students indicated that having course materials such as lecture notes, practice quizzes, videos, and PowerPoints available on their mobile phones would be beneficial for their study process. Students indicated that they would be comfortable to allow their lectures to contact them through their mobile phones. When the question was asked that "which communication method do you prefer for social and business networking?" Students checked phone calls as number one, followed by WhatsApp Messenger. Students also indicated that, apart from using their mobile phones to make and receive calls, WhatsApp texting was the activities they often engaged in with their mobile phones.

DISCUSSION AND CONCLUSION

Discussion

This paper depicted an ontology of an ongoing research study. The purpose of the research was to better understand the application of WhatsApp Messenger by using its features to construct meaning for learners and instructors in a blended mobile online learning context. The study was based in a university in Ghana with three campuses and two learning centers with total student population of about 10,000. A sampled total of 807 students from three campuses and two learning centres of the university adopted the use of WhatsApp Messenger in a blended online learning mode. Total sample size for the study was 807, composed of 58 percent male and 42 percent female. Students above the age of 25 formed the dominant age group for the study, scoring a total of 83 percent. Sixty percent of the students were married with about 44 percent indicating that about 4 persons depend on them for their sustenance. About 51 percent of the students indicated that they entered the university with other qualifications apart from associate degree or high school diploma.

Concerning commitment to study, about 89 percent of the students indicated that they work, while about 54 percent of them were engaged in full time employment. Forty-three percent of the students in the study were committed to study for about ten hours a week. The results from the demographics report fit traditional adult learners as described in the literature. According to Ross-Gordon (2011), adult students, referred to as – non-traditional students form sizeable presence on university campuses and also constitute a substantial share of the undergraduate student body. The National Center for Educational Statistics (NCES, 2009) survey reported that 38 percent of student enrolment for the 2007 academic year were 25 years of age or older. Choy (2002) cited the 2002 NCES statistics that defined seven characteristics of non-traditional students as follows:

1. Entry to college delayed by at least one year following high school,
2. Having dependents,
3. Being a single parent,
4. Being employed full time,
5. Being financially independent,
6. Attending part time, and
7. Not having a high school diploma.

Ross-Gordon (2011) described characteristics that separate re-entry adults from other traditional university students to be; “the high likelihood that they are juggling other life roles while attending school, including those of worker, spouse or partner, parent, caregiver, and community member” (p. 27).

Conclusion

In designing the blended mobile learning structure, I applied agile methodologies using WhatsApp Messenger as a learning platform, that meets the current infrastructural conditions in Ghana. Seth Earley (2017), stated that, there must be the need to interpret user signals accurately to “enable the system to present the right content for the user's context,” this may “require not only that our customer data is clean, properly structured, and integrated across multiple systems and processes but also that the system understand the relationship between the user, his or her specific task, the product, and the content needed” (pp. 58-64).

According to Yeboah and Ewur (2014), the adoption of WhatsApp in the classroom is anathema. To them, the technology is nuisance to university students. They concluded that, “if students bring their mobile phones to class, they get bored of the lesson and find their way onto WhatsApp. These detracts their attention from the main lesson, and are not able to fully

understand what is going on, hindering participation and drawing them even further into WhatsApp making it more difficult for them at the end of the day” (p. 162).

Contrary to Yeboah and Ewur's, assertions, the current paper has proven otherwise. In this study, I made several assertions that, for WhatsApp to work properly in any classroom in Ghana, there must be intentional designs and step-by-step approach to teach both the faculty and the students how to use the application to achieve the utmost outcomes (see table 4, above). Because, I believe that, “seemingly intractable problems have been solved by advances in processing power and capabilities. Not long ago, autonomous vehicles were considered technologically infeasible due to the volume of data that needed to be processed in real time. Speech recognition was unreliable and required extensive speaker-dependent training sessions. Mobile phones were once "auto-mobile" phones, requiring a car trunk full of equipment” (Earley, 2017, pp. 58-64).

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Foreign Direct Investment and Economic Stability: The case of Arab Peninsula

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ABSTRACT

Purpose – The purpose of this research paper is to present the study regarding foreign direct investment and its relationship with economic stability. The case of Arab peninsula is discussed throughout the paper. **Methodology** – The secondary research design was selected and the exploratory study was conducted. The time series analysis was presented by exploring the FDI investment in Oman, Jordan, Saudi Arabia, Kuwait, Bahrain and Qatar. The data three-year data was collected by studying the FDI investment reports shared by Santander Trade. **Findings** – The findings of study presents the information regarding increase and decrease in FDI in countries from Arab Peninsula. The findings show that Qatar, Kuwait and Bahrain are able to accelerate their FDIs due to political and economic stability, but Saudi Arabia, Oman and Jordan are having downward FDI trend. **Implications** – This paper benefits academically and practically by providing the three years trend which can help investors to explore the favourable countries within Arab Peninsula for FDIs. On another side, the academic practitioners can utilize this study to conduct the future study by comparing least and most significant countries within Arab Peninsula for foreign investments.

Keywords: Foreign Direct Investment (FDI), Arab Peninsula, Globalization, Bilateral ties and Political Instability

INTRODUCTION

Overview

Foreign direct investments (FDIs) play an imperative role in the developing economies as it has been examined as one of the contributing factors towards economic stability. It has increasing implications for the economic development because it leads the economy towards internationalization, stimulated by trade technology, financial flows, and accessibility towards the resources (Guerin, and Manzocchi, 2009). Viewing the global perspective, FDIs is one of the prominent factors that helps in stimulating the economy, but it is immensely influenced by the political stability because investors from foreign markets tend to make investment plans when they find strong bilateral ties between the countries (Rotunno, 2016; Cooray, Dutta, and Mallick, 2017).

Problem Statement

FDIs are one of those economic factors that have the ability to increase turnover of any economy and can result in the internal stability, but it is mainly supported by a stable political regime, which helps in creating a favorable situation for any foreign investor to make investments. Poor economic conditions are reported due to poor FDIs that are synchronized with the political conditions and government stability (Al-Rashid, 2015). Considering the political situation of Arab countries, it is seen that due to rising internal conflicts and external inclusion in political affairs, internal FDIs are being influenced, which as a result is creating a negative impact on the economic stability of entire Arab Peninsula. In recent scenario, due to Syrian war and the rising influence of ISIS, the economic well as the political stability of Arab Peninsula is under threat, which has increased internal conflicts and chaos, militarization, ethical and religious tensions for the region (Ianchovichina, and Ivanic, 2016). Therefore, the problem statement of the study is *to analyze the relationship between FDI and economic stability under the influence of various socio-economic and political determinants.*

Background

The course of globalization and the intensive outlook towards bilateral ties reveals that political regime tends to influences the internal investments and trading. Democratic economies tend to set lower barriers for trading; thus resulting in forming open trade relationship with the political alliance countries. Apparently, FDI influences the economic growth, but political relations are the source towards increasing FDIs for any economy. In this regard, Harrigan, and Reshef, (2015) presented the argument that democratization results in trade liberalization that is skill-biased (Lin, and Fu, 2016). The argument is further supported by the idea, which states that have autocratic political setup tend to trade substantially lesser comparative to democratic political systems because, in autocratic setup, political elites impose more trading barriers or the policies tends to be relatively strict (Cervellati, Naghavi, and Toubal, 2013; Guerin, and Manzocchi, 2009).

Foreign direct investments by various multinational institutions have grown immensely in last few decades within developing countries and results in their economic development. It has become the soul of creating a better trading environment that is accompanied by formal and informal bilateral ties with the neighboring and foreign economies. However, in the Arab states, the investments fall by 8% which were \$43.9 billion in 2014, whereas, in 2013, the investments were \$47 billion (YourMiddleEast, 2015). Besides, in 2008, the decline in the FDI level was also witnessed in the Arab region that clearly illustrates the overall impact on the inflow of investments due to global crisis. In different countries of the Arab Peninsula, the challenges are different that are more or less related to determinants related to politics. In Jordan, the major political challenge is corruption, whereas, in Lebanon, the challenges are mainly due to poor labor regulations and more sanctions on trading (Al-Rashid, 2015).

Aims of the Research

The aim of the study is to investigate and analyze the relationship between FDIs and economic stability that is affected due to political instability in the Arab peninsula.

Research Questions

- [1] How influential the relationship of FDIs is with the economic growth?
- [2] What are the socio-economic and political key determinants that influence inward investment decisions?
- [3] How political instability affected the inflow of FDI in the economic growth of Arab Peninsula?

Significance of the Research

The study plays a significant part in sharing concrete and comprehensive understanding about FDIs in Arab countries, mainly the Arab belt that is suffering from war and poor political situation. It shares understanding about the effect that internal conflicts within this region created on economic stability and reduced the inflow of FDIs, thus resulting in unemployment, higher inflation, and poverty. The key political determinants that are discussed in the study are internal conflicts and chaos, external conflicts (poor bilateral ties and alliances), government instability, militarization, corruption in Arab countries, religious influences (like ISIS), war situations, and ethical tensions. Considering the latest situation, the study will play an imperative role to analyze the issue by means of exploratory research method. Further, the study also plays a significant role in adding knowledge to future academic practitioners to understand the link between FDIs and economic stability in the light of socio-economic and political determinants.

LITERATURE REVIEW

Foreign Direct Investment

The foreign direct investment is the phenomena, which is resulting due to globalization and it involves the integration of the domestic economic system with the global markets. The phenomena of foreign direct investment are accompanied through market openness and political stability which enhances the domestic capital in the economy. Moran (2012), unfold the main reason behind the increase in direct investment and mentioned that the technological advancement emerged the more efficient means to communicate and transport which led an investor to think beyond the political boundaries. Especially, in the post-colonial era the firms acquired independence and the phenomena of globalization influence the trade among investors and the foreign countries, thereby it refers to the theory of comparative advantage where the countries with scarce resources trade with counties with abundance resources to gain potential benefits. Therefore, as economies expanded the exchange of goods, services and trade grew which continued to the advancement.

The studies of Iamsiraroj and Ulubaşoğlu (2015); Amri (2016); Solomon (2017) elucidated that foreign direct investment plays key contribution in the growth of economy implicitly and explicitly as it is the cross-border investment. The investment is significant that boost the economic growth and the FDI leads towards positive externalities which in addition increases the growth level of the technological spillover effects. The inward flow of FDI also benefits host economy to transmit knowledge, technology and manufacturing capabilities as it cumulatively increases the gross domestic problems due to increase in sales and production of the company.

However, multiple studies of scholars such as Shahbaz, Nasreen, Abbas, and Anis (2015), mentioned the political risk associated with FDI; Carkovic and Levine (2005), highlighted loss in investment returns due to political instability and the study of Zhang (2001), mentioned military control that affects the investment decisions. Aside from these studies the recent studies of Iamsiraroj and Ulubaşoğlu (2015); Amri (2016); Solomon (2017), mentioned that despite *economic* stability the FDI can positively or negatively influence on environmental regulations, military politics, law and order, internal conflicts, external conflicts, religion polities, labor laws, trade tariffs, spending and currency valuation.

Foreign Direct Investment and Economic Stability in Arab Region

The foreign direct investment is linked with the economic development especially in term of positive development. The concept impact of FDI on economic growth and development has been focused in endogenous growth models of Rubelo, Lucas, Romer and other new classical theorists such as Cobb-Douglas and Solow that focused upon the political and economic perspective of FDI rather than technological or humanistic (Shahbaz, Nasreen, Abbas and Anis,

2015). Numerous studies have been conducted, which examined the impact of FDI in increasing the per capita income and its contribution to socio-economic and political development (Efobi, Asongu, and Beecroft, 2015).

The Arab region contains 22 countries that show the formal and common Arabic language (Appendix A). During 1944 majority of Arab countries established the League of Arab states which was joined by other countries and the main goal was to enhance the (i) relationship among member state (ii) Safeguard the sovereignty and independence (iii) Coordinate and collaborate. The Arab monetary fund is an example of Regional Arab organizations, which started its operations in 1977 and served 22 counties. Its core aim is to promote financial markets in Arab counties, established policies, remove restriction and encourage monetary cooperation (Moran, 2012). According to AMF, the countries are classified into three major groups which include:

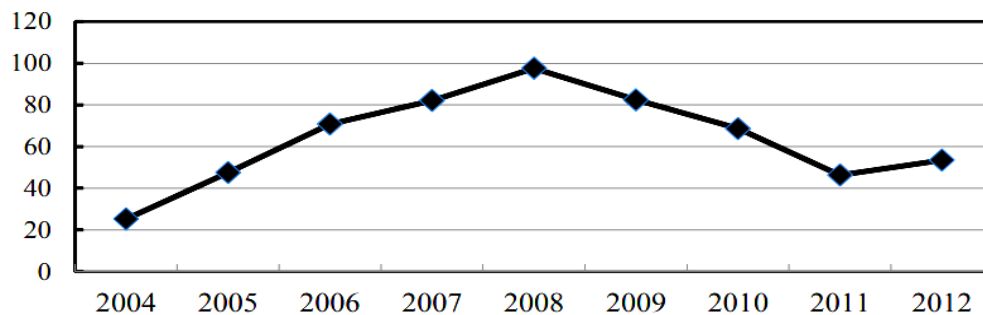
Table 1: Arab Peninsula Countries

Gulf Cooperation Council (GCC)	Oman, Qatar, Kuwait, UAE, Bahrain and Saudi Arabia	These countries are politically stable and they have open trading and financial system to export oil, gas, natural resources and promote inward FDIs
Oil exporter countries	Iraq, Sudan, Algeria, Libya and Yemen	They export oil and are lesser open in foreign markets for inward FDI
Diversified economies	Jordan, Egypt, Comoros, Djibouti Syria, Palestine, Morocco, Lebanon, Tunisia, Mauritania, and Somalia	These countries significantly relies upon inward and outward FDI and they have range of profitable sectors such as agriculture, textiles, tourism, and banking, which plays major role in economic development and it encourages investors

Source: Iamsiraroj and Ulubaşoğlu (2015)

As highlighted by Amri (2016), the FDI inflow grew in Arab countries from 2004 to 2012 due to political and economic stability. The increase in oil prices, political stability, technological improvement and economic reforms created a positive business climate and during 2008 the Arab region reached to the peak of US\$97 billion (Bekhet and Al-Smadi, 2015). However, the global financial crises affect the Arab region and by 2009 the 15.5% decline was seen. However, 2012, 2015 the increase in FDI inflow was by 15.3% to 19%. The below table presents the FDI inflows in Arab countries from the period of 2004 to 20115 below figure:

Figure 1: FDI inflows



Source: Iamsiraroj and Ulubaşoğlu (2015)

Impact of Socio-Economic and Political Factors on Foreign Direct Investment

The economic growth of emerging countries and market depends upon the possibilities to accumulate capital and profitable investment. The access to foreign capital allows the country to exploit the opportunities and it attracts foreign investors. Various authors such as Shahbaz, Nasreen, Abbas, and Anis (2015); Solomon (2017); justified the impact of FDI on economic development statistically, but simultaneously the scholars identified a wide range of economic and political determinants that are discussed below:

Table 2: Determinants of FDI

Determinants	Explanations	Sources
Government Stability	It refers to the ability of government to develop efficient macroeconomic policies and ability to pay off the debts quickly	Solomon (2017)
Socio-economic conditions	It refers to the social and economic condition that arise from government actions and social dissatisfaction	Shahbaz, Nasreen, Abbas, and Anis (2015)
Internal Conflicts	It refers to the political violence within the nation and its potential and actual impact on the governance. It includes civil disorder, civil war, terrorism and civil disorder	Bekhet and Al-Smadi, (2015)
External Conflicts	It refers to the incumbent risk from foreign markets and the non-violence external pressure such as cross-border conflicts	Moran (2012)
Military in Politics	It refers to the military influence in the political and economic affairs, which shows the inability of government to function efficiently	Osabutey and Okoro (2015);
Ethical tensions	It refers to the degree of tension between the racial, ethical, language or national divisions	Kariuki (2015);
Democratic Accountability	It shows the responsiveness of government towards its political rights and civil liberties	Rodan (2016)
Religion in Politics	It refers to the religious tension due to governance by single religious group or the replacement of civil with religious law or elimination of religion from social or political process	Iamsiraroj and Ulubaşoğlu (2015)

Source: Iamsiraroj and Ulubaşoğlu (2015)

The Uppsala model is the behavioral theory of firm which was influenced by the theory of Penrose that relates to the growth of the firm. The Uppsala Model school of thought considers FDIs as the operations conducted by business in overseas market; thus the model justifies the potential risk due to culture, political, economic and market condition (Kim and Li, 2014). It is seen that the macro environmental factors have greater impact on the business decisions for expansions. Therefore, the investments are also suffered due to macro environmental factors. The model suggests that the firm must gradually involve into the foreign market through taking progressive actions. Receiving foreign investments can help not only businesses, but the environment is also influenced based upon growth (Dentinho, and Silva, 2017). Due to FDIs,

the chance of economic development and social stability becomes obvious. It gives a chance to people of the country to enhance their living standards and this reduces in reducing the inflation rate as well (Shen, and Puig, 2018). The model suggests that the international experiences are divided into two categories, which includes general and specific international experiences. The strategic planning results in mutual benefits of home and host country, which also mitigate the negative effect resulting from social-economic and political instability. Hence, the role of FDIs tends to be influential in turning the poor economy into growing economy.

Besides this, scholars such as Osabutey and Okoro (2015); Kariuki (2015); Rodan (2016) mentioned the location-specific factors, which allow investors from home country to identify the effectiveness of host country. The main determinant identified by the scholar was the potential risk, which affects the expected outcome of the investment. Pandya (2014) explained the political risk as the risk, which can affect the business environment and its operations. It not only influences the operational execution of the business at one hand, but also turns the economy into dark because due to political instability, the social and economic instability is seen. However, the worst consequences are seen when the social instability and the chaos is witnessed, which makes the people of the state more frustrated. Brahim and Rachdi (2014), mentioned 12 indicate of the political risk which is based on the international country risk guide (ICRG). The outcome of studies proved that the Arab counties with low political risk and better institution irrespective of government stability. This is mainly due to the political alliance that is seen in the Arab countries that helps in giving an equal opportunity to small countries that are underdeveloped to enhance their socio-economic conditions.

METHODS

Methods

The issue discussed in the study was about analysing the relationship between FDIs and economic stability in the light of socio-economic and political determinants and the analysis was done on the case of Arab Peninsula; therefore, the methods suitable for the study were secondary approaches. The study intended to analyse the present situation that is influenced by several factors. Data gathering was done based upon approaching the secondary sources of information that helped in knowing the specific challenges Arab region is facing towards receiving FDIs that is affecting its economic and social stability. However, the reason identified from the literature review was that the FDIs are being affected due to poor political situation and the chaos that is being faced as the result of war.

Hence, the philosophical approach suitable on the paradigm of the study was '*Social Constructivism*'. It is the theory that is related to exploring any actual phenomenon by focusing upon its in-depth aspects. The philosophical approach focuses upon a single phenomenon and its relation to the concept that helps in knowing its practical side (Andrew, Pedersen, and McEvoy, 2011). The philosophical approach also supports in applying the exploratory research design on the study where gathering new evidences helped in investigating the issue. The reason to choose exploratory research design was that it helped to analyse the phenomenon by defining a problem and then searching the relevant secondary content so that the analysis can be done. Therefore, a brief problem statement was designed in the study that directs towards gathering the relevant facts and theoretical evidences (Ioannidis, Greenland, Hlatky, Houry, Macleod, Moher, Schulz, and Tibshirani, 2014).

Material

The material that was used to present the analysis on the issue was taken from the secondary sources. Mainly, various official documents such as published official reports on economic development have been used. To analyse the case, multiple published articles were also used

and online content was accessed because much information can be seen on websites, (mainly newspapers, online articles, and reports). Hence, much have been gathered on understanding the current situation of Arab Peninsula by accessing the FDIs report shared by Santander Trade. The time series analysis was conducted and the data was taken from 2014 to 2016. The report shared by Santander Trade helped in analyzing the current situation of FDIs inflow in Arab Peninsula and 3 years trend. The secondary data helped in revealing some informative facts such as the decrease in FDIs in specific regions of Arab Peninsula including Oman, Jordan, Bahrain, Kuwait, Saudi Arabia and Qatar.

Analysis

Arabian Peninsula is the western Asia which is situated in Africa on the Arabian plate. It is considered as the subcontinent in Asia and recognized as the largest peninsula of a world with 3,237,500 km. The counties that fall under Arab Peninsula are Qatar, Yemen, Kuwait, Bahrain, UAE, Jordan, Iraq and Saudi Arabia. Qatar is the leading country in foreign direct investment and international business. From past few years due to political stability the country has 774 million FDI inflows due to lowest corporate tax in the world (Ulrichsen, 2009). Qatar also develops high-quality infrastructure and enacted investment laws which allow foreigner to own totality of company in industries such as consulting, information technology, sports, culture and distribution. Since 2015 the country also made improvement in foreign working conditions which expanded the FDI inflows in Qatar. The below figure shows the trend analysis of three years FDI inflows in Qatar:

Table 3: FDI inflows in Qatar

Foreign Direct Investment Qatar	2016	2015	2014
FDI Inward Flow (million USD)	774	1,071	1,040
Number of Greenfield Investments	33	35	54
FDI Stock (million USD)	33,943.10	33,169.2	32,098.30
FDI Stock (in % of GDP)	21.7	20.1	15.6
FDI Inwards (in % of GFCF)	0.8	1.2	1.4

Source: Santander, (2018)

Likewise, Qatar, Kuwait is also actively promoting the inward FDI especially in its petrochemical industry. The country encourages the entry of foreign banks and develops the law on taxation policy for foreign companies which decrease the tax rate on profits (Odhiambo, 2017). The existing policy of Kuwait promotes FDI in infrastructure development, communication technology, waste and water treatment, banking sector, insurance sector, software development, hospitals along with attraction foreign capital in tourism, urban development and freight. The below figure presents the trend analysis of three years FDI inflows in Kuwait:

Table 4: FDI inflows in Kuwait:

Foreign Direct Investment Kuwait	2016	2015	2014
FDI Inward Flow (million USD)	275	294	954
Number of Greenfield Investments	31	17	24
FDI Stock (million USD)	14,260	14,604	15,733
FDI Stock (in % of GDP)	13	12.8	9.7
FDI Inwards (in % of GFCF)	1	1	3.6

Source: Santander, (2018)

In Arab peninsula, Bahrain is another country with positive FDIs and during 2016 about 280 million USD FDI inflows have been reported. According to Bahrain economic development 142 million, \$ were invested by 22 companies and the tourism accounted for three-quarter of FDI flows. The manufacturing accounted for 15%; whereas financial services accounted 9%. The FDI inflows were mainly from US, Germany, China and India (Odhiambo, 2017). The Bahrain FDI stock recovered the global financial crises and political instability. However, Bahrain remains under challenge due to the rigid labour market and lack of privatization. The below figure presents the trend analysis of three years FDI inflows in Bahrain:

Table 5: FDI inflows in Bahrain

Foreign Direct Investment Bahrain	2016	2015	2014
FDI Inward Flow (million USD)	282	-797	1,519
Number of Greenfield Investments***	35	38	33
FDI Stock (million USD)	28,606	28,325	29,122
FDI Stock (in % of GDP)	89.7	91	87.2
FDI Inwards (in % of GFCF****)	3.6	-10.7	17.8

Source: Santander, (2018)

In countries such as Jordan, UAE and Saudi Arabia the negative and downwards FDI inflows have been reported since last 3 decades. Jordan historically appreciated massive investment by the Gulf countries. Until 2006 to 2014 the country FDI is declining due to political instability. The substantial loss was reported during 2016 and US decided to raise their annual aid by 1,275 billion. These funds in the US aim to support Jordan to greet Syrian refugees (Santander, 2018). To boost the FDI the Jordan government planned large-scale projects i.e. energy projects water projects and transportation, but it requires massive investment. In 2016 the Dead Sea project was signed by Kuwait and by 2018 the project of dead sea to red sea is expected to get started, but require FDI. Despite these unfavourable conditions Jordan is trying to become the logistics hub for transport and electric network. The below figure presents the FDI inflows in Jordan:

Table 6: FDI inflows in Jordan:

Foreign Direct Investment Jordan	2016	2015	2014
FDI Inward Flow (million USD)	1,539	1,600	2,179
Number of Greenfield Investments***	21	7	14
FDI Stock (million USD)	32,148	30,629	29,059
FDI Stock (in % of GDP)	83	81.5	81
FDI Inwards (in % of GFCF****)	20	22.1	28.6

Source: Santander, (2018)

In Oman till 2015 the FDI inflows were negative but after 2016 modest recovery has been noted in FDIs. The FDI stock has been restored after 2010 and the foreign investment is accelerating since 2016. The Sultanate of Oman is able to attract the investment by offering them tax benefits. The political stability and favourable macroeconomic condition attracted international businesses that are especially from China, Japan and US (Santander, 2018). However, one of the pressures faced by foreign companies is the recruitment of domestic workforce, which creates an obstacle in foreign investment. Majority of FDI in Oman are in oil sector and the construction of airport, seaports, refinery accelerate the tourism facility. The below figure shows the FDI inflows in Oman:

Table 7: FDI inflows in Oman

Foreign Direct Investment Oman	2016	2015	2014
FDI Inward Flow (million USD)	142	-2,692	1,506
Number of Greenfield Investments***	36	42	42
FDI Stock (million USD)	18,547.70	18,405.70	21,097.70
FDI Stock (in % of GDP)	29.4	26.4	26
FDI Inwards (in % of GFCF****)	0.6	-11.4	6.5

Source: Santander, (2018)

Similarly to Oman, FDI inflows in Saudi Arabia are following downward trends and according to world investment Report (UNCTAD), the KSA is the third largest FDI recipients in western Asia. In 2016 the FDI inflows fell by 8.5% compared to 2015, which was the lowest value since 2014. The reason for the downward trend is due to political tension and economic instability. Besides this, the policy of Saudization also creates a huge obstacle in FDI inflows. The below figure represents the trend analysis of FDI inflow in KSA:

Table 8: FDI inflow in KSA

Foreign Direct Investment Saudi Arabia	2016	2015	2014
FDI Inward Flow (million USD)	7,453	8,141	8,012
Number of Greenfield Investments***	90	92	97
FDI Stock (million USD)	231,502	224,050	215,909
FDI Stock (in % of GDP)	36.2	34.4	28.5
FDI Inwards (in % of GFCF****)	4.5	4.2	4.2

Source: Santander, (2018)

FDI plays a significant part in the development of the country and it creates global integration through training and development, transfer of knowledge, development of human capital and sharing of operational expertise. Before investing in any country the investor looks after following factors:

- I. Availability of Infrastructure
- II. Social and political stability
- III. Availability of Skilled workers
- IV. Tax regimes
- V. Market size
- VI. Per capita income
- VII. Foreign exchange rules and regulations

Considering these factors the below is the analysis of countries that fall under Arab peninsula:

Table 9: Weak and Strong Determinates of FDIs

Countries	Weak Point towards FDIs	Strong Point towards FDIs
Bahrain	Political and civil upheaval Officials travel bans Difficulty in obtaining work permits Corruption and government interventions in tenders	English speaking and educated population Cultural openness Strategic location Attractive tax regime
Saudi Arab	Inadequate legal framework Lack of transparency Delayed in payments Conservative cultural environment Segregation of sexes	Economic stability High spending power Quality infrastructure Well regulated banking system
Kuwait	Dependent on oil Lack of protection towards intellectual property	High living standards Abundance oil reserves Consumer demand for foreign products Strong banking system Absence of taxes
Jordan	Unstable region due to Iraq, Syrian and Israel conflicts Massive influx of refugees from Iraq Lack of natural resources Dependent upon foreign aid	Well trained workforce Geographical location

Source: Santander, (2018)

DISCUSSION

The economic structure of the Arab world is not monolithic, but it has unified system. It had heterogeneous economies that are placed at different economic development stages. However, the prevalent element that is considered as the binding force of the Arab counties is that these are the Islamic states and based upon Islamic civilization. They major economic growth and productivity is based upon two categories that include [1] non-oil production states, and [2] oil production states. The oil production states are the GCC member countries, whereas the non-oil production states are Jordan, Syria, Morocco, and Egypt (Noland and Pack, 2008). This GCC countries economic growth is mainly rely upon the oil production and in case of any depletion in the oil production, then the economy suffers and fluctuation is seen. At present, from the analysis, it is identified that the Arab Peninsula is facing major challenges due to structural weaknesses that is hampering the ability of these countries in making the transition towards being productive economic system (Benchea, 2015). The analysis revealed the following constraints at macro-economic and political level:

- [1] Dependence on the oil revenues, as the dominance of production is on oil revenue, therefore the growth in GDP is majorly based upon oil production. This gives the 70% exports to the region, resulting in economic growth. However, the major political instability seen in this region is due to oil and natural gas, and this has majorly increases foreign intervention in the political stability of the region (Benchea, 2015).
- [2] The major economic challenge faced by the Arab peninsula is the unemployment level. The report stated by International Labour Organisation (ILO) reveals that the Arab region has higher unemployment rate that is 10.3% comparative to the overall global unemployment rate i.e. 6.2% (ILO, 2011).

- [3] According to the latest report of World Health Organisation (WHO), there is also water scarcity seen in the Arabian Gulf, mainly Arab Peninsula. This is due to the poor management and regulations, socio-economic instability and various other challenges as well (Odhiambo, 2017).
- [4] The economic instability and poor flow of FDIs is also due to unequal distribution of natural reserves in the Gulf. Hence, this had also increased the security issues and potential tensions for the region as well that is affecting the regional development (Ulrichsen, 2009).

CONCLUSIONS AND IMPLICATIONS

The economic growth of any country is centralized based upon its entire macro-economic system. It not only involves the socio-economic factors, but there is equal insertion of political factors too. The role of FDIs is prominent in economic development and growth, but the political factors are parallel in creating an impact on economic stability. In the case of Arab Peninsula, it is seen that the FDIs are being affected by the poor political situation. This is due to the state of war that created hindrance in the economic growth and stability of the region. The interest of investors is affected due to the unstable situation and the changing political environment. At present, the economic growth of those countries in Arab Peninsula is also at risk who are not directly involve in political incongruity, but the cross-border impact has affected the investments in those countries; thus resulting a negative impact on their economic growth. The study concludes that FDIs do have major influence on the economic growth because a major portion of GDP is governed by the investments received from foreign sources, but the interest of investors is suffered when they find major constrains (mainly political instability and anarchism in the state). Hence, there is need of policy implications at governmental level in order to regulate foreign investments in the region in the course of economic stability.

The role of UAE and Saudi Arabia can be pivotal in creating political stability within Arab Peninsula. At present, it is seen that the major countries of Middle East can play a mediating role in bringing harmony within Arab Peninsula considering the enduring repercussions of poor economic development on society and future of the state. Besides, if the major actions are not taken at earlier, then a social disturbance may increase due to poverty and unemployment in the region, which may eventually affect the stability of major Middle Eastern countries (such as Saudi Arabia, UAE, Turkey, Iran etc.). Besides, aids can be given to Arab Peninsula for their redevelopment so that they can rebuild their social system. Lastly, on-going support from neighboring countries can help to overcome internal challenges where it is necessary at political level to create a barrier on foreign intervention in political affairs of these regions so that social harmony can be build.

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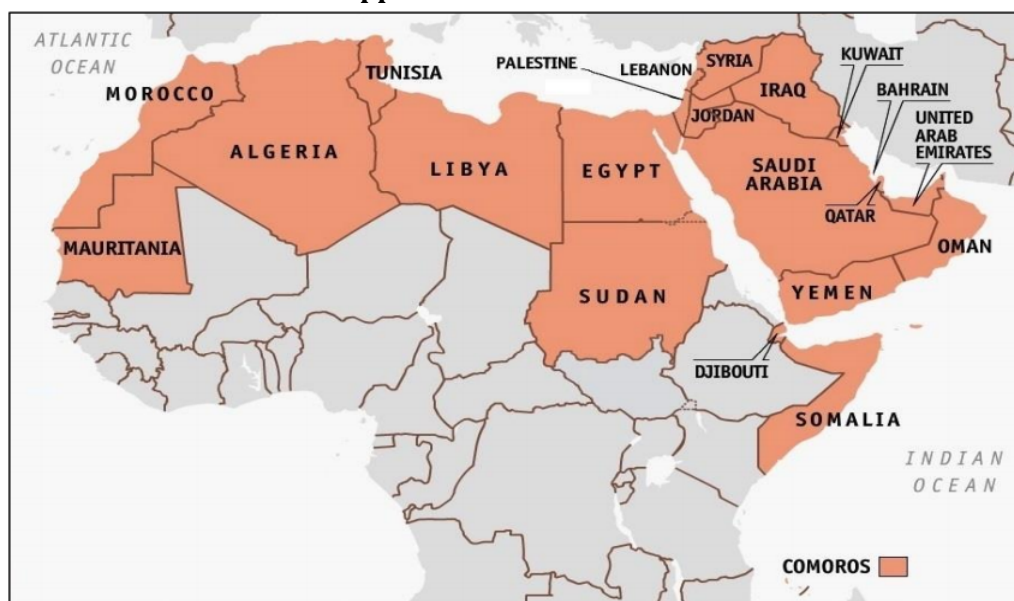
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APPENDIX

Appendix A: Arab Countries





A Comprehensive Profile Analysis of the Effect of Job Embeddedness on Turnover Intention among New Generation of Rural Migrant Workers in China: Based on PLS-SEM

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ABSTRACT

This paper aimed to examine the relationship between organization embeddedness (OE), community embeddedness (CE) and turnover intention in the context of manufacturer sector in China. A 37-item questionnaire was filled by 384 new generation of rural migrant workers. Data were examined through a first-order of reflective model (SME1) and a two-stage of second-order reflective-formative hierarchical model (SME2) with the technical of Partial Least Squares. The empirical test results indicated that both OE and CE negative and significant related to turnover intention. When further disaggregated the components of OE and CE into the three sub-dimensions of fit, links, and sacrifice, this study found that causal indicator model of job embeddedness predict more variance of turnover intention than reflective model. Moreover, this study found that OEF, OES, CEF, and CES negative and significantly associated with turnover intention, while OEL positive related to turnover intention. Additionally, CEL did not show significant impact on turnover intention. The study concludes with several implications and recommendations for future research.

Keywords: Turnover Intention; Organization Embeddedness; Community Embeddedness; New Generation of Rural Migrant Workers; China.

INTRODUCTION

In terms of voluntary turnover, numbers of researchers have explored the turnover process (i.e. job attitudes, job alternative, and job search) and provided multivariate turnover models. However, previous studies have demonstrated that job attitudes variables (i.e., organizational commitment, job satisfaction) play a relative small role in explaining only 4%-5% of variance in turnover [1]. Other scholars have stressed that job alternatives and job search were weak predictions of turnover [1]. Same modest predictive strength (i.e. 5% to 25% of variance) of traditional turnover models in turnover was revealed in previous studies [2][3]. The modest predictive strength of traditional job attitudes, job alternative, job search, and traditional turnover models have inspired turnover scholars in exploring other new theories to gain insight into the turnover [4]. Theory of job embeddedness (JE) was characterized as one of these new viewpoints [5][6][7] which have been demonstrated its additional explanation

variance in turnover [8]-[11], and generalized it to different context, such as European countries [12], Japan [13], Albanian employees [14], China [15], individualistic and collectivistic cultures [16]. The sheering number of the empirical studies about job embeddedness are inspiring, but the construct of job embeddedness still need to be addressed [6] [11].

Firstly, majority of previous job embeddedness researchers focused on organization embeddedness, while few focused on community aspects [6][17]. Secondly, documented literatures have showed mix results about the effect of job embeddedness on turnover across individual studies [16]. Studies conducted from USA [16][19][20][21][22], India [16], and Thailand [23] have indicated that organization embeddedness significantly predicted turnover, whereas community did not. In contrast, studies from [6][12][24] revealed that only community embeddedness significantly predicted turnover, but organization embeddedness did not show its significant relationship with turnover. Thirdly, job embeddedness researchers have claimed that only a handful of studies have examined the separate dimensions of fit, links and sacrifice both in organization and community embeddedness [8][23]. Previous researchers have stated that “a comparative research of reflective and a causal indicator model is interesting” [8]. Thus, further examination of the impact of community embeddedness, organization embeddedness, including the three sub-dimensions (links, fit and sacrifice) on turnover in a wider range of national, cultural and organizational context and respondents are needed [8][10][11][23]. Moreover, to date, in China, studies about job embeddedness are still limited and most of them are conducted among skilled employees [25]-[30]. The measurement of job embeddedness in these previous studies are adapted from Crosley's (2007) global scale, which primarily focused on organization embeddedness items that are widely regarded as ignoring the concern of community embeddedness items. Hence, it is of great importance to further explore the influence of the formative measurement of job embeddedness (community embeddedness and organization embeddedness) on turnover and extend to different types of respondents rather than skilled workers in China.

Therefore, current study aimed to investigate the influence of organization embeddedness and community embeddedness on turnover intention through a survey study targeting the sample of new generation of rural migrant workers¹ (low-ranking, low skilled workers) in the manufacture sector of China. By disaggregate the components of organization embeddedness and community embeddedness into the three sub-dimensions of links, fit and sacrifice, recent study further studied the link between these components and turnover intention. The contributions for this study can be outlined in three aspects. Firstly, this study provided a comprehensive profile analysis of the effect of the separate composites (fit, links, and sacrifice) both in organization embeddedness and community embeddedness on turnover intention. Compared with the global reflective measurement of job embeddedness, the causal indicators completely capture the job embeddedness construct space, and different relationships were found across these dimensions. Secondly, this study responded to the call for more attention about the study of community embeddedness. It provided an insight into the scores for community embeddedness on turnover in different context. Thirdly, resent study extend the context of job embeddedness study to a low-ranking, low-skilled workers (i.e. new generation of rural migrant workers) in a non-western country of China.

¹According to the definition of China's Official documents, rural migrant workers are the peasants who come from rural area and engage in non-agricultural works in cities [67]. Identified by the household registration system and land contract system in China, rural migrant workers work in non-agricultural sectors, but they still hold rural residents household registration and own farmland in their home countryside [54]. Rural migrant workers who were born after 1980s' are called new generation of rural migrant workers.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Turnover

Turnover is the process that an employee voluntarily and willingly terminated his/her organizational membership [31]. An individual's voluntary turnover behavior is result in his/her personal wishes, such as better job opportunities, family migration, physical health and other personal reasons, or may also other organizational factors from the alternative job opportunities, like much pay and benefits, promising promotion development and more comfortable working conditions. It is costly if firm frequently encounter employees' voluntary turnover [32]. The high costs of employees' turnover behavior manifest in the rising of recruiting, selecting, training new employees, and decreasing productive capacity and negative effects on performance, loose of proficiency, knowledge and skill [33]-[35]. Organizations that can effectively maintain human capital have more advantages than organizations that cannot [7].

Due to the difficult to measure actual voluntary turnover, researchers have explicitly stated that turnover intention is the most proximal and accurate precursor of actual voluntary turnover [36]-[40]. The assumption of intentions are the most immediate and accurate predictor of behavior has been confirmed in the theory of reasoned action [41] and the theory of planned behavior [42]. Prior researcher has pointed out that turnover intention is the next logistical stage after employee experienced job dissatisfaction, evaluation of expected utility of search and cost of quitting, following thinking of quitting and intention to search for alternatives [43]. In line with these assumptions, this study applies turnover intention as the similar construct of actual voluntary turnover behavior, and defined it as employees' overall performance or attitudes that they desire to leave their current organizations and search for other job opportunities, but the actual turnover behavior not yet happen.

In order to better understand individual's voluntary turnover decision-making process, scholars have explored numbers of voluntary turnover models, including (1) Participant's Turnover Decision-Making Model [44] (2) Employee Turnover Decision Process Model [43] (3) Turnover Factors Model [45] (4) Cusp Catastrophe Model of Employee Turnover [46] (5) The Unfolding Voluntary Turnover Model [47] (6) Combination Voluntary Turnover Model [48] (7) Voluntary Turnover Model. From the development of voluntary turnover models, we can found that these turnover studies were originally stem from March and Simon's central concepts: desirability of leaving (e.g. job satisfaction) and ease of movement (perceived job alternative). For a long time, most of the explanations of turnover studies follow three underlying assumptions, notably, (1) job dissatisfaction is a pervasive turnover cause, (2) dissatisfaction employees seek and leave for alternative (better) jobs, and (3) prospective leavers always compare alternatives to their current jobs based on a rational evaluation of their liner sequence SEUs [49]. Thus, job satisfaction and job alternatives are widely considered as prime turnover movers for a long time [49]. However, after years' development, turnover researchers have found that job attitudes variables (i.e. job satisfaction and organizational commitment), play a relatively small role in explaining only 4%-5% of variance in turnover behaviors [1]. At the same time, job alternatives and job search have been demonstrated that they are weak prediction of turnover [1]. In addition, same modest predictive strength (i.e. less than 5% to 25% of variance) in turnover of traditional turnover models has been revealed in previous studies [2][3].

Job embeddedness

Job embeddedness was defined as "the combined forces that keep an employee from leaving his or her job"[51] has been demonstrated its significant superiority in explaining turnover behaviors than traditional job attitudes variables, job search and job alternatives. The

construct of job embeddedness was originally conceptualized as overall factors including psychological, social, and financial that make individuals stay at their current jobs [6]. These factors were categorized into organization and community embeddedness. Employee embedded in the organization and community is embedded in their current jobs. Specifically, organization embeddedness is conceptualized as work-related elements that remain an employee in his/her current job, while community embeddedness is operationalized as community related factors that directly bind an individual to his/her current job [5]. Community factors (i.e. family, safe neighborhood and compatibility with weather and local culture) are recognized as equal force to organization factors which bind employee to his/her current job. Furthermore, job embeddedness was operationalized into three critical sub-dimensions, namely fit, links and sacrifice, which include three by two matrix that reflects six dimensions: fit, links and sacrifice in organization and community.

Fits

Fit is defined “as the extent to which an individual’s perception of compatibility or comfort with his/her organization and surrounding environment” [5]. It reflects the degree of an individual’s personal interests and values fit with his/her job, organization and community. Good organization-individual fit associate with an individual’s personal values, plans and career goals of future, knowledge, skills, and abilities that are well-matched with the demands of his/her job and organizational culture. Furthermore, how well an individual fit with the community and surrounding environment also will influence his/her embeddedness in the organization and job. These aspects are independent of organization fits, including amenities, weather, culture, outdoor activities, religion, political and entertainment activities. The higher likelihood employee perceived fit with his/her organization and community, the more he/she will feel compatible and comfort to his /her organization, community and job [5].

Links

Links were originally characterized as the extent to which an individual formally and informally connect to a people and institutions or other people in a psychological, social and financial web including work and non-work groups, friends, communities and the physical environment in which individual lives [15]. The interaction between people and work team members, other colleagues and their supervisors constitute the links between people and their organizations. Thus, having a good relationship with work team members or colleges, and supervisors are associated with an individual’s high organization links. The interaction between an individual and his or her friends, relatives who live with his/her in the same community, and social group constitute the links between an individual and his/her community. For example, being marriage and having children are parts of community links. Thus, having a spouse who are working in the community or having children whose schools are in the community are all associated with an individual’s high community links. Mitchell et al., (2001) opinioned that the more strains and important an individual connect to the web, the more possibility an individual might embedded in his/her job and organization. However, these links might be population-specific different [5] [6].

Sacrifice

Sacrifice refers to the perception losses of material, psychological or social benefits when an individual leave his/her organization and community [5]. An individual will give up job-related benefits if he/she leave his/her job, such as stock options, pension compensation, colleagues, interesting projects and job advancement opportunities. Meanwhile, community sacrifice occurs if one has to relocate. Leaving a community might cause various community related conveniences losses, such as desirable home or community, local club membership and

preferred geographical location. The more benefits people might give up when leave his/her organization or community, the more feeling of sacrifices when he/she leaves the job [5].

The above literature review lead to the following hypotheses:

H1: There is a negative and significant relationship between organization embeddedness and turnover intention

H1a: There is a negative and significant relationship between organization embeddedness fit and turnover intention

H1b: There is a negative and significant relationship between organization embeddedness links and turnover intention

H1c: There is a negative and significant relationship between organization embeddedness sacrifice and turnover intention

H2: There is a negative and significant relationship between community embeddedness and turnover intention.

H2a: There is a negative and significant relationship between community embeddedness fit and turnover intention.

H2b: There is a negative and significant relationship between community embeddedness links and turnover intention.

H2c: There is a negative and significant relationship between community embeddedness sacrifice and turnover intention.

RESEARCH FRAMEWORK

Guided by the prior literature reviews, this study proposed two research frameworks which were depicted as figure 1 and figure 2.

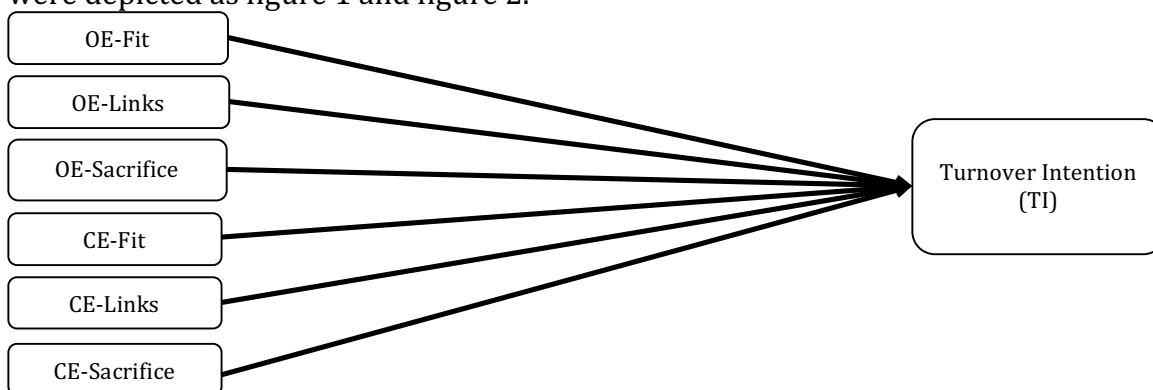


Figure 1
Research Framework 1

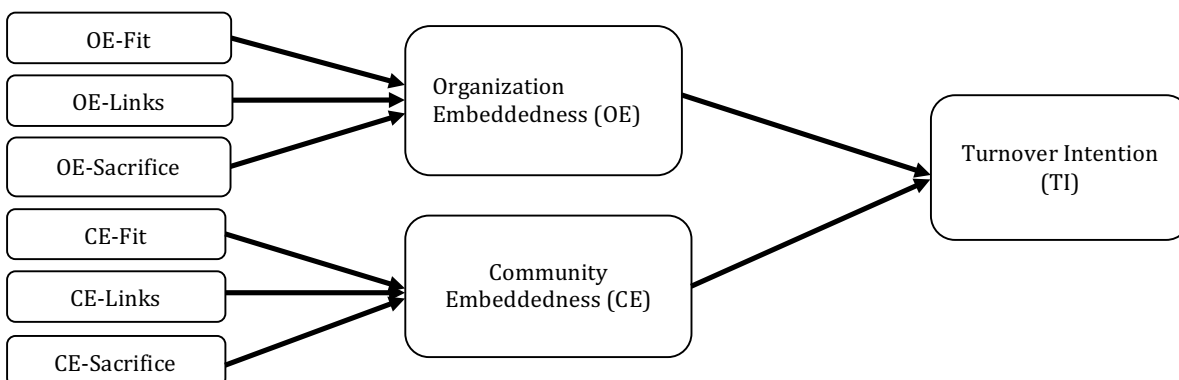


Figure 2
Research Framework 2

DATA ANALYSIS

Respondents and Data Collection Procedure

Respondents in current study targeted new generation of rural migrant workers who are working in manufacturer sector of China. As an key part of labor supply in China, new generation of rural migrant workers were highlighted as industrial workers [52]. According to the reports from China National Statistics Bureau (2016), there were 281.71 million rural migrant workers accounting for 36.3% of the total labor force (776.03 million) by the end of year 2016 in China. Among this large number, there were 140 million new generation of rural migrant workers accounting to 49.7% of the total number of rural migrant workers. The large number shift from farming labor to non-agriculture sectors provided low cost labor force and created labor force comparative advantage to China's industries development [53]. To same extend, new generation of rural migrant workers extremely contributed to China's high-speed economic development and promote the society transform from an agricultural to an industrial society [54]. Unfortunately, rural migrant workers have showed high voluntary turnover behaviors for a long time and currently evolved into short-term employment trend. In terms of new generation of rural migrant workers, who are born after 1980's and 1990's, their job duration are only 1.5 and 0.9 years respectively (Zhang, 2016).

Data was collected from November 2017 to March 2018 in 7 factories in Guizhou province which is located at southwest of mainland China. By assistance of the managers from each human resource department in the factory described the purpose of this study to the new generation of rural migrant workers, the respondents complete the questionnaire voluntarily and anonymously within two days. 600 questionnaires were distributed out of which 384 questionnaires were finalized for this study. The sample contain 217 male (56.5%) and 167 female (43.5%). 125 (32.6%) of these respondents are 16 to 26 years old, while, 259 (67.4%) of them are in the age of 27 to 37. The sample consist of 192 (50%) married, 172 (44.8%) single, and 20 (5.2%) divorce. With respect to education, 131 (34.1%) and 90 (23.4%) are educated in the level of secondary school and high school respectively, while 65 (16.9%) and 83 (21.6%) achieved secondary technical school and Junior college education respectively. In terms of organizational tenure, there are 199 (51.8%) work on current factory for 3 or more years. Whereas, 49 (12.8 %), 72 (18.8%), 72 (19%) and 64 (16.8%) of them have been working in their current companies for 12 to 18 months, 6 to 12 months and less than 6 months respectively. In this sample, 95 (24.7%) did not change their jobs before, however 113 (29.4%), 95 (24.7%) and 81 (21.1%) of them have one time, two times and three times job quite experience before.

Measurement

Six items taken from [56][57] were used to measured turnover intention. Organization embeddedness and community embeddedness were operationalized from [5] and [27]. A final scale of 17-item of organization embeddedness and 14-item of community embeddedness were implied in current study. Answers were elicited on a 7-point Likert scale ranging from 7= 'strongest agree' to 1 = 'strongly disagree'. These variables scales were originally written in English, and accomplished into Chinese version through a multistage translation and back-translation procedure suggested by Brislin (1980).

Data Analysis

Data received from the respondents were loaded into Partial Least Squares (PLS) to analysis the Structural Equation Model (SEM) and tested the hypotheses. Measurement model assessment (outer model) and structural model (inner model) were investigated in this study.

Assessment of Measurement Model

In terms of the measurement model assessment, a two-stage approach including first-order reflective measurement model and a second-order formative measurement model were examined in this section.

Reflective Measurement Assessment

In the reflective measurement assessment, indicator reliability, internal consistency reliability, convergent validity, and discriminant validity were investigated in this study. In specific, Cronbach Alpha, indicator loadings, composite reliability (CR), average variance extracted (AVE), cross-loadings, Fornell-Larcker, and Heterotrait-Monotrait ratio (HTMT) were reported in this section. According to [59], the acceptable value of Cronbach Alpha should be 0.7 or higher. {Formatting Citation} suggested that the common rule of thumb is that the composite reliability value, and standardized outer loadings should be at least 0.60, and 0.708 or above respectively. An AVE value of 0.50 or higher is the criterion that indicates the construct explains more than half of the variance of its indicators [60]. Table 2, table 3, table 4, and table 5 shows the results of the first-order reflective measurement model from Smart-PLS 3.2.7.

Based on table 2, we found the loadings of items in the model have achieved the rule of thumb value suggested as 0.708. However, two item (OEL1 and OEL4) loading (0.698 and 0.648) were below 0.708, but higher than 0.4. According to [60], indicators with outer loadings between 0.40 and 0.70 should be considered for removal from the scale only when deleting the indicators leads to an increasing of composite reliability above the suggested threshold value. However, according to table 3, the construct of OEL CR value is 0.852, which is higher than the standard cut-off value of 0.708. Hence, we still consider retain these two items in current study.

Table2. Indicator loadings and Crossing Loadings.

	CEF	CEL	CES	OEF	OEL	OES	TI
CEF1	0.866	0.475	0.389	0.351	0.406	0.474	-0.385
CEF2	0.835	0.384	0.327	0.275	0.356	0.36	-0.326
CEF3	0.853	0.408	0.298	0.238	0.326	0.363	-0.296
CEF4	0.804	0.477	0.208	0.311	0.398	0.399	-0.24
CEF5	0.879	0.488	0.33	0.433	0.408	0.499	-0.412
CEF6	0.891	0.506	0.352	0.424	0.405	0.494	-0.415
CEL1	0.46	0.834	0.378	0.476	0.525	0.525	-0.341
CEL2	0.423	0.797	0.363	0.296	0.415	0.328	-0.18
CEL3	0.473	0.895	0.354	0.251	0.371	0.378	-0.276
CEL4	0.465	0.885	0.365	0.241	0.382	0.361	-0.264
CES1	0.24	0.358	0.82	0.341	0.346	0.316	-0.348
CES2	0.252	0.277	0.793	0.267	0.241	0.21	-0.273
CES3	0.4	0.394	0.837	0.272	0.284	0.291	-0.407
CES4	0.33	0.359	0.841	0.23	0.262	0.214	-0.4
OEF1	0.365	0.325	0.304	0.876	0.57	0.592	-0.472
OEF2	0.331	0.333	0.296	0.859	0.541	0.49	-0.4
OEF3	0.314	0.356	0.271	0.855	0.577	0.497	-0.389
OEF4	0.263	0.329	0.201	0.717	0.531	0.45	-0.264
OEF5	0.423	0.365	0.309	0.865	0.567	0.507	-0.481
OEF6	0.311	0.286	0.282	0.825	0.588	0.447	-0.374
OEF7	0.319	0.235	0.257	0.801	0.499	0.434	-0.356
OEL1	0.391	0.441	0.26	0.373	0.698	0.394	-0.147
OEL2	0.306	0.36	0.285	0.493	0.759	0.459	-0.158
OEL3	0.292	0.401	0.237	0.629	0.81	0.526	-0.244
OEL4	0.266	0.291	0.153	0.502	0.648	0.432	-0.117
OEL5	0.386	0.355	0.3	0.431	0.737	0.322	-0.264
OES1	0.368	0.361	0.227	0.516	0.493	0.799	-0.274
OES2	0.484	0.455	0.337	0.58	0.533	0.856	-0.42
OES3	0.383	0.389	0.201	0.497	0.51	0.839	-0.28
OES4	0.384	0.368	0.239	0.426	0.41	0.859	-0.35
OES5	0.518	0.448	0.297	0.484	0.482	0.884	-0.391
TI1	-0.369	-0.274	-0.415	-0.418	-0.23	-0.381	0.921
TI2	-0.324	-0.268	-0.449	-0.417	-0.233	-0.344	0.907
TI3	-0.372	-0.302	-0.365	-0.492	-0.279	-0.436	0.902
TI4	-0.393	-0.315	-0.362	-0.43	-0.272	-0.365	0.89
TI5	-0.38	-0.276	-0.356	-0.404	-0.214	-0.324	0.882
TI6	-0.412	-0.318	-0.439	-0.439	-0.255	-0.386	0.906

With respect to internal consistency, table 3 displays that the CR values of all the constructs in this study were higher than 0.6. Hence, all the constructs in the reflective measurement model have reached internal consistency. On the other hand, table 3 also shows that the AVE value of all construct were higher than 0.50. Therefore, all the constructs in the reflective measurement model have achieved convergent validity.

Table 3. Findings of the measurement model (First Order, Reflective).

	Alpha	CR	AVE
OEF	0.925	0.939	0.689
OEL	0.792	0.852	0.537
OES	0.903	0.927	0.719
CEL	0.878	0.915	0.729
CES	0.843	0.893	0.677
TI	0.954	0.963	0.812

Moreover, table 4, table 5 depict the results of the assessment of discriminant validity regarding to Fornell-Larcker criterion, and Heterotrait-Monotrait Ratio (HTMT). According to [60], discriminant validity is established when (1) an indicator’s outer loading on the associated construct is greater than any of its cross-loadings (i.e., its correlation) on other constructs. (2) Fornell-Larcker criterion should be greater than its highest correlation with any other construct (3) a disattenuated correlation between two constructs close to 1 indicates a lack of discriminant validity. Hence, based on Table 2, table 4, and table 5 this study has achieved all threshold values in cross-loadings, Fornell-Larcker and Heterotrait-Monotrait ratio (HTMT) in the external consistency.

Table4. Discriminant Validity of Fornell-Larcker Criterion.

	CEF	CEL	CES	OEF	OEL	OES	TI
CEF	0.855						
CEL	0.535	0.854					
CES	0.379	0.428	0.823				
OEF	0.406	0.384	0.335	0.83			
OEL	0.449	0.503	0.345	0.664	0.733		
OES	0.512	0.482	0.315	0.591	0.571	0.848	
TI	-0.416	-0.324	-0.442	-0.481	-0.275	-0.415	0.901

Table5. Discriminant Validity of Heterotrait-Monotrait Ratio (HTMT)

	CEF	CEL	CES	OEF	OEL	OES	TI
CEF							
CEL	0.588						
CES	0.409	0.488					
OEF	0.422	0.41	0.378				
OEL	0.518	0.59	0.408	0.772			
OES	0.541	0.517	0.35	0.643	0.686		
TI	0.429	0.339	0.482	0.501	0.289	0.434	

Formative Measurement Assessment

In terms of formative measurement assessment, this study investigated the potential collinearity problem, and the significance for outer weights of each indicator to the formative construct. A variance inflation factor (VIF) with 5 or higher respectively indicates a potential collinearity problem [61]. Table 6 indicates the results the formative measurement assessment. Based on this table, this study found that all the constructs in the formative measure model did not have collinearity problems. Additional, table 6 also shows that indicator of community embeddedness links (CEL) was not significant (t-value=0.707) to its formative construct. However, due to its high significant of outer loading (t-value=7.742, above 0.50), we retain this indicators. Therefore, the current study has achieved all threshold values of the formative measurement (organization and community embeddedness), and a further analysis of the structural model can continue.

Table6. Findings of Measurement Model for Formative construct (Organization, Community Embeddedness.)

	Outer weights	T-Values 2-tailed	Outer Loadings	T-Values 2-tailed	VIF(outer)
OEF	0.925	25.042	0.925	25.042	2.032
OEL	0.528	6.161	0.528	6.161	1.962
OES	0.797	13.033	0.797	13.033	1.684
CEF	0.525	5.401	0.803	13.336	1.458
CEL	0.079	0.707(NS)	0.626	7.742	1.528
CES	0.620	6.857	0.853	17.735	1.273

Assessment of Structural Model

This part investigated structural model collinearity issues, R^2 level, f^2 effect sizes, predictive relevance Q^2 , q^2 effect sizes, and significance and relevance of the structural model relationships. A VIF value of 5 or higher is considered as critical levels of collinearity [61]. Table 7 indicates the collinearity assessment of current study's structural model. From table 7 we can conclude that the VIF values in current study are clearly below the threshold of 5. Thus, there are no collinearity problems in current structural model. Further evaluations about the coefficient of determination (R^2), predictive relevance (Q^2) and effect size (f^2 , q^2) can continue.

Table7. Inner VIF Values.

	TI	Collinearity Problems
OE	1.284	No
CE	1.284	No

The Coefficient of Determination (R^2), Predictive Relevance (Q^2) and Effect Size (f^2 , q^2)

With respect to evaluate the model's predictive power, present study assess the coefficient of determination (R^2 value). The value of R^2 was characterized as the combined effects of the exogenous latent variables on the endogenous latent variable [60]. R^2 values of 0.75, 0.50, or 0.25 for endogenous latent variables respectively represent the substantial, moderate, or weak coefficient of determination [61][62]. In addition, this study evaluate the effect size of the predictor constructs using Cohen's f^2 [63]. The value of f^2 [$f^2 = (R^2_{include} - R^2_{exclude}) / (1 - R^2_{include})$] assesses how strong the exogenous variable's contribution into R^2 values of the endogenous variable. The f^2 value of 0.02, 0.15, and 0.35 represent small, medium, and large effects (Cohen, 1988) of exogenous latent variable respectively, while effect size value of less than 0.02 indicate that there is no effect. Moreover, current study assesses the predictive relevance (Q^2) of the path model and its effect size (q^2). The value of Q^2 with larger than 0 indicate the exogenous variable have predictive relevance for the endogenous variable, while the effect size of q^2 [$q^2 = (Q^2_{include} - Q^2_{exclude}) / (1 - Q^2_{include})$] allows assessing a certain exogenous variable's contribution to an endogenous variable's Q^2 value. The q^2 value of 0.02, 0.15, and 0.35 respectively represent small, medium, and large predictive relevance of exogenous variable for a certain endogenous latent variable. Table 7 illustrates the coefficient of determination (R^2), predictive relevance (Q^2), and their effect size (f^2 , q^2).

Table7. The Coefficient of Determination (R²), Predictive Relevance (Q²), and Effect Size (f², q²).

Endogenous Latent Variable	R ² (SEM1)	R ² (SEM2)	Q ² (SEM1)		Q ² (SEM2)	
TI	0.382	0.367	0.287		0.342	
Exogenous Latent Variable	f ²	Effect size	Q ² include	Q ² exclude	q ²	Effect size
OEF	0.122	Small to Medium	0.287	0.230	0.080	Small to Medium
OEL	0.048	Small to Medium	0.287	0.265	0.031	Small to Medium
OES	0.015	No effect	0.287	0.280	0.010	No effect
CEF	0.034	Small to Medium	0.287	0.271	0.022	Small
CEL	0.000	No effect	0.287	0.287	0.000	No effect
CES	0.095	Small to Medium	0.287	0.243	0.062	Small to Medium
OE	0.155	Medium	0.342	0.252	0.137	Small to Medium
CE	0.152	Medium	0.342	0.256	0.131	Small to Medium

Assessment of Structural Model Path Coefficients

Recent study used two-tailed tests of significance level 5% to test the hypotheses. Thus, a critical t-value of 1.96 is considered as the threshold to examine the hypotheses in our current study [60]. In addition, researchers have claimed that using T-values and p-values is not sufficient when reporting the significance of the structural model relationships. When performing bootstrapping test, the confidence intervals bias corrected result of upper and lower bound should be out of 0 point [60]. Table 9 indicates the results of the structural Model Path Coefficient.

Table9. Results of the Structural Model Path Coefficient.

Hypotheses	Relationship	Beta	T-Values 2-tailed	P-Values	Confidence Interval (BC)		Decisions
					LL (2.5%)	UL (97.5%)	
1	OE -> TI	-0.355	7.164	0.000	-0.445	-0.248	Supported
2	OEF -> TI	-0.394	6.518	0.000	-0.512	-0.276	Supported
3	OEL -> TI	0.252	4.080	0.000	0.145	0.388	Not Supported
4	OES -> TI	-0.135	2.012	0.044	-0.267	-0.005	Supported
5	CE -> TI	-0.351	6.581	0.000	-0.454	-0.245	Supported
6	CEF -> TI	-0.186	3.279	0.001	-0.301	-0.075	Supported
7	CEL -> TI	-0.017	0.288	0.773	-0.128	0.100	Not supported
8	CES -> TI	-0.277	5.159	0.000	-0.377	-0.169	Supported

From table 9, recent study has found the negative and significant relationship among organization embeddedness and turnover intentions ($\beta=-0.355$, $t=7.164$, $p=0$), community embeddedness and turnover intention ($\beta=-0.351$, $t=6.581$, $p=0$), organization embeddedness fit and turnover intentions ($\beta=-0.394$, $t=6.518$, $p=0$), organization embeddedness sacrifice and turnover intention ($\beta=-0.135$, $t=2.012$, $p=0.044$), community embeddedness fit and turnover intentions ($\beta=-0.186$, $t=3.2799$, $p=0.001$), and community embeddedness sacrifice

and turnover intentions ($\beta=-0.277$, $t=5.159$, $p=0$). Hence, hypotheses 1, 2, 4, 5, 6, and 8 all were supported. However, this study found that organization embeddedness links positively and significantly predict turnover intention ($\beta=0.252$, $t=4.080$, $p=0$). Hence, hypothesis 3 was rejected. Moreover, there was not significant relationship between community embeddedness links and turnover ($\beta=-0.017$, $t=0.288$, $p=0.773$) Therefore, hypothesis 7 was not supported in this study.

DISCUSSIONS

The above data analysis results indicated that organization embeddedness (OE) and community embeddedness (CE) totally can explain 36.7% (in SEM2) variance of turnover intention among new generation of rural migrant workers in manufacturing sector. However, the totally explained variance modestly enhance to 38.2% (in SEM1), when the exogenous latent variables separated to the three sub-dimensions (i.e. organization embeddedness fit, links, and sacrifice; embeddedness links, fit, and sacrifice). When compared the predictive relevance (Q^2) of the path model between model 1(SEM1) and model 2 (SEM2), we found that the formative measurement model (SEM2) including OE and CE has a larger predictive relevance ($Q^2=0.342$) than the reflective measurement model (SEM1) including OEF, OEL, OES and CEF, CEL, CES ($Q^2=0.287$). These findings provided a view that job embeddedness is indeed a causal indicator model than reflective indicator model when conduct the research in the context of turnover.

Additionally, this study found the negative and significant relationship between OE ($\beta=-0.355$, $t=7.164$, $p=0.000$), CE ($\beta=-0.351$, $t=6.581$, $p=0.000$) and turnover intention. The negative significant relationship between OE and turnover intention was consist with previous studies [16][19][20][21][22][23]. Meanwhile, the negative significant relationship between CE and turnover intention was consist with previous study [8][12][24]. Further compare the strength about the beta coefficients and t-values of OE ($\beta=-0.355$, $t=7.164$, $p=0.000$) and CE ($\beta=-0.351$, $t=6.581$, $p=0.000$) in predicting turnover, we can conclude that OE and CE are nearly sharing the same scores in predicting new generation of rural migrant workers' turnover intention in the manufacturing sector of China.

Furthermore, when we disaggregated the components of OE and CE into the three sub-dimensions, this study found same negative significant relationships between OEF ($\beta=-0.394$, $t=6.518$, $p=0.000$), OES ($\beta=-0.135$, $t=2.012$, $p=0.044$), CEF ($\beta=-0.186$, $t=3.279$, $p=0.001$), CES ($\beta=-0.277$, $t=5.159$, $p=0.000$) and turnover intention. These results consist with previous studies [5], [15], [64]. However, a non-significant relationship ($\beta=-0.017$, $t=0.288$, $p=0.773$) between CEL and turnover intention, The non-significant relationship between CEL and turnover intention is consist with prior studies[23].

Moreover, in consistent with previous study [5][15][64], this study found the relationship between OEL and turnover intention was positive ($\beta=0.252$, $t=4.080$, $p=0.000$). The positive relationship between OEL and turnover intention was consist with prior studies [15]. This finding shows that higher links increase intention to leave. This can be explained by the theory of social capital. According to social capital, social network can be classified it into "the strength of strong ties" and "the strength of weak ties" [65]. The strength of the social network an individual hold will absolutely impact on the acquisition of employment information and opportunities, thereby lead to higher job mobility [66]. In terms of rural migrant workers, who are defined as the peasants that come from rural area and engage in non-agricultural works in cities [67], they lived in rural villages before engaging in urban manufacturer. Their employment opportunities are relative limited, and primarily depended on the strength of

strong ties, such as their family members and friends who have been worked in cities [65]. For new generation of rural migrant workers, the primary social capital that is linked to the kinship of ancestry is the first important means for them to obtain information in the city to find jobs in cities [65]. By utilizing the strength of strong ties of their relatives and friends, new generation of rural migrant workers find their first jobs in the city. At the same time, their relatives and friends who have been worked in urban cities might imply the strength of weak ties with the owners of the manufacturer or the peers in the same manufacturer and connected their social network to the urban members who owned resource in the cities. Thus, after obtaining jobs in the city, their own social capital will increase, but finally lead to high intention to quit because they have gained more employment information from the weak ties facilitating them find better jobs in another organization. Hence, having a good relationship with co-workers and supervisors, good attachment in departments of the organization, good job training opportunities provided by the organization, and long tenure of current working industry are associated with an individual's high organization links. These weak ties become the primarily approach that new generation of rural migrant workers gain further development in the urban cities. However, the strong ties of interaction between an individual and his/her friends, relatives who live in the same community show weak function for their further promotion in the urban city. In other words, new generation of rural migrant workers might show higher propensity to quit their current jobs as long as they can get help from these weak ties, when their strong ties did not help them to get a good job any more.

RECOMMENDATIONS

Firstly, by detailing the cultural and social difference in Chinese society, we found the distinct role of OEL and CEL in predicting new generation of rural migrant workers' turnover intention. Thus, human resource manager in the manufacturer might concern about the positive effect of OEL when they carry out management approach to new generation of rural migrant workers, because it might lead to high propensity to quit; Secondly, the results of current study were found in the context of new generation of rural migrant workers of China. Thus, future study could generalize it to different context and different industries. Thirdly, this study is a cross-sectional study. A longitudinal methodology might be necessary to validate this study in future. Finally, this study used turnover intentions instead of actual turnover behaviors. Even though there were theoretical and empirical evidence demonstrating that turnover intention is the most proximal forecaster of voluntary turnover, the current study still ignored that individuals who do not plan to quit job but do leave because of internal or external events.

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Regional Governance and Sustainability: Research towards evidence- based policy making, at the Region of Crete

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ABSTRACT

It is widely accepted that sustainable regional development can only be achieved if the concept of sustainability is strongly connected with innovation and improvement of regional governance. This task is extremely important yet demanding as long as several policy levels and areas are interconnected as well as it is crucial to equally reinvigorate the basic pillars of sustainable development, namely economy, society and the environment. Thus, in order to conclude if the basic prerequisites exist and whether there are dynamics, drawbacks as well as opportunities in the regional level, it is important to conduct research concerning the above-mentioned connected policy areas, notions and concepts. This paper aims to analyze the basic outcomes of a large-scale qualitative and quantitative research that was conducted in the region of Crete in Greece, in order to categorize the problems, challenges, opportunities and drawbacks that regional governance, encounter and propose ways-directions in order to overcome them and achieve a socially, economically and environmentally viable future.

Keywords: Regional governance; sustainability; innovation; evidence- based policy making, regional development.

INTRODUCTION

Sustainability, regional development and innovation are three interconnected concepts which include several fields of policy implementation. At the same time, these concepts underline the importance of regional governance in terms of implementing policies that respect the sustainability values-pillars, namely environment, economy and society [1]. It turns out that the concept of sustainability has been introduced in the public discourse during the 1960s under serious concerns about the rising environmental problems [2]. Over the years and in the light of the changes that have been a result of the rapid industrialization and the transformation of the society into a highly consumerist one, the need for further protection of natural resources has emerged [3, 4, 5, 6]. It should be noted that sustainable development is directly connected with regional development and its objective is the creation of sufficient, innovative economies which will offer welfare conditions for their citizens. Therefore, it is crucial for the local and central authorities to create the conditions that will encourage research and entrepreneurship.

The main aim of this paper is to present some of the basic outcomes of a large-scale research, conducted in the region of Crete, Greece in 2016 by the Centre for Political Research and Documentation (KEPET) and the Centre for Human Rights (KEADIK) of the Department of Political Science of the University of Crete, within the framework of the Research Project entitled "*Governance, Sustainability and Regional Innovation*", funded by the *Region of Crete* (KA 4289, Team Leader: Professor Nikos Papadakis, Duration: 19 October 2015- 18 April 2018). The first part of the paper comprises a brief analysis of the theoretical dimensions taken into account for the conduction of the research. In the second part an analysis of the basic outcomes of the quantitative and qualitative research that was conducted in Crete is presented followed by the presentation of the basic proposals and conclusions. The main aim is to stress the importance for intervention in specific sectors of the local society, economy and administration in order to effectively address the existing problems and to enhance development and innovation. The opinion of the citizens as well as the opinion of institutional actors' representatives are considered decisive in investigating the basic parameters of regional development, sustainability and innovation along with the prospects for improvement and amelioration in the three sustainability pillars (economy, society, environment) in the local level (region of Crete) during the current recession period.

THEORETICAL INSIGHTS ON SUSTAINABILITY, REGIONAL DEVELOPMENT AND GOVERNANCE

From the initial emergence of the inherent human desire to construct and systematically participate in organized collective structures, the necessity for their conscious formation and for reaching different ways of their governance arose. Unavoidably, although "governance" as a term is used to a large extent in the articulation of political discourse, it therefore emphasizes on issues in both central and regional-local state administration [7]. However, it is difficult to clearly define a generally acceptable and completely specific definition for governance. This formulation is reinforced by the review of the international literature, where it is evident that the term "governance" contain a conceptual diversity [8, 9]. However, political science has tried to "delimit" this concept by using it in order to highlight the institutional and / or informal impact of various social and economic factors in the policy process [10] as well as for demonstrating the numerous transformations of the ways that political decisions are made. Thus, political decisions are the result of the dialectical negotiation between state (government) and private actors, and the emergence of new ways of governance [11], based on three main pillars; responsibility, transparency and participation [12].

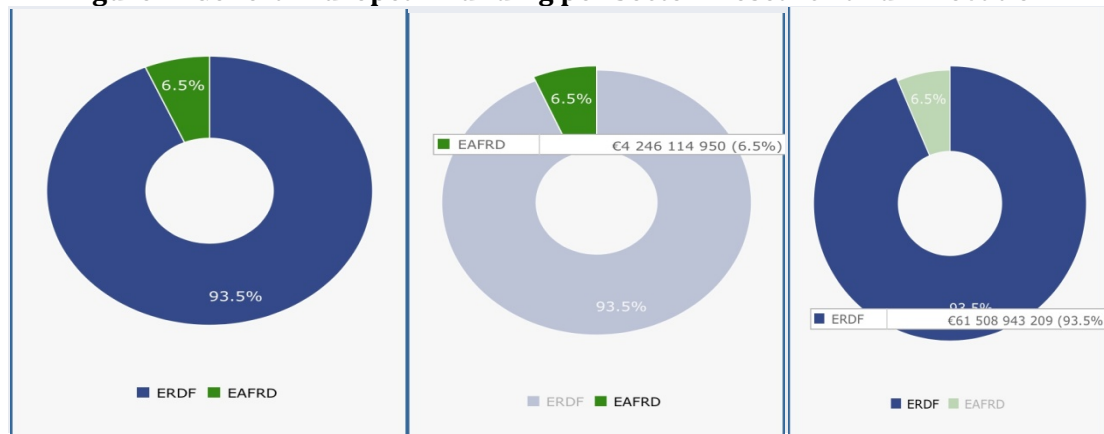
However, over the decades and with the successive changes that have taken place in the globalized “society”, from the early industrial period to the late industrialization and then to the age of digitization and automation, the need for modernization of the governance models is evident. In this respect, the notion of “sustainability” plays an important role. Recognizing its catalytic role, the European Union (EU) recently has included it at the core of the European policy guidelines, as long as sustainability contributes decisively to growth as well as to social and economic well-being, along with the necessary emphasis on environmental protection.

As it has been already stated, the concept of sustainable development is based on three mutually reinforcing and interconnected pillars; the environmental, the economic and the social. The key features of the environmental pillar focus on maintaining a stable basis for managing environmental resources, avoiding their over-exploitation as well as enhancing renewable energy systems, but having as a key point the preservation of biodiversity and respect of the natural ecosystem. Correspondingly, the characteristics of the economic pillar include the production of products and services on a lasting basis, while it emphasizes on efforts in order to enhance social justice, without, however, hampering the functioning of the free market. In terms of the social pillar, in order for a system to be socially sustainable, a fair distribution should be achieved, with equal opportunities to social goods, opportunities and services for all citizens [4, 5, 13, 14].

In this context of reforming the new governance models, the regional institutions, which emerge as an active and central factor of economic development and political intervention, play a predominant role [9, 15]. The shift, which include efforts in order to strengthen the decentralized administration, contributes to the activation of the regions in order to promote innovation within the international competitive environment, with the upper aim of cultivating competitive advantages that bring about positive economic, environmental and social outcomes. Therefore, innovation plays a key role in regional development as it contributes to the enhancement of the interconnection between technology, private actors and regional institutions, with focus on promoting new technologies and developing relevant skills [9, 16].

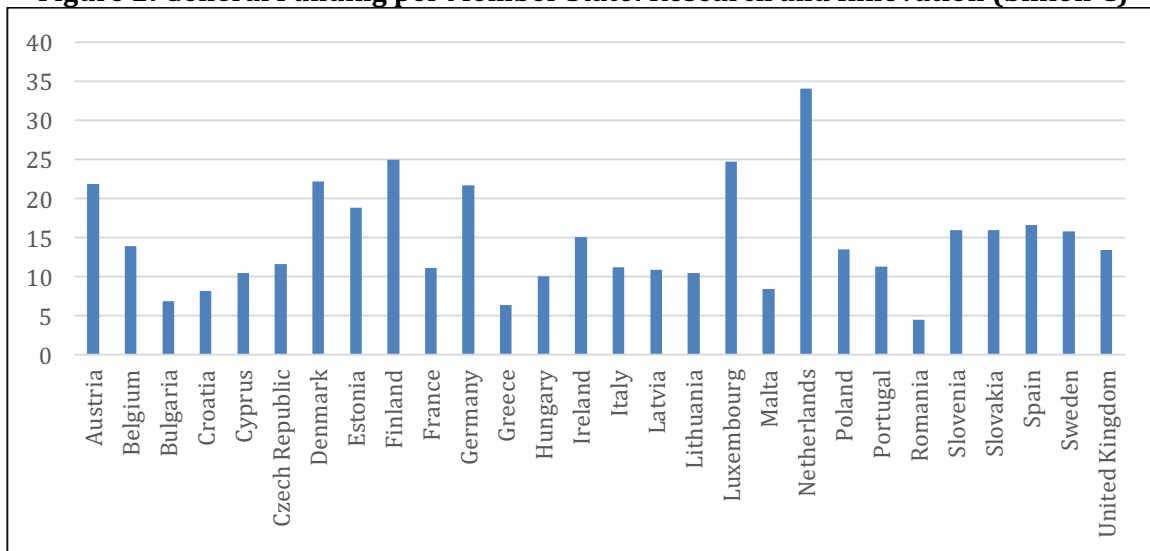
Based on the above-mentioned, it turns out that sustainable development is directly linked with regional development, aiming at economic growth and the achievement of regional innovation. This makes necessary the cultivation of those conditions that will contribute to the creation of wider systems that will encourage innovation, research and entrepreneurship. The EU plays a key role in this strategy through the implementation of the “Innovation Union” initiative in the context of the new European Strategy. This EU support is reflected in the funding of € 69.8 billion for the period 2014-2020 for smart growth, including regional development, employment, research, energy and transport networks, education and training, € 62.5 billion for sustainable development and natural resources, including agriculture, rural development and the environment [17], and € 65.5 billion for the promotion of innovation (Figure 1). However, as reflected in Figure 2, Greece is in the last positions among EU countries in relation to the funds spent on innovation and research, and therefore the need for the design and implementation of a political strategy that will support innovation and research in order to provide a springboard for economic growth and consequently on social prosperity, is highly eminent.

Figure 1: General European Funding per Sector: Research and Innovation



Source: European Commission data on General Funding on Research and Innovation (2017). Available online at: http://ec.europa.eu/regional_policy/el/policy/themes/research-innovation/.

Figure 2: General Funding per Member State: Research and Innovation (billion €)



Source: European Commission data on General Funding on Research and Innovation (2017). Available online at: http://ec.europa.eu/regional_policy/el/policy/themes/research-innovation/.

AIM OF THE STUDY

Based on the above-mentioned theoretical considerations, a research project was designed by the Centre for Political Research and Documentation (KEPET) and the Centre for Human Rights (KEADIK) of the Department of Political Science of the University of Crete, in order to study the parameters, connections and dimensions of sustainability and regional governance at the region of Crete, Greece. The main objective of the project was to investigate the multidimensional interaction between governance models and sustainability as well as to produce new knowledge for sustainable development and governance through empirically-based planning of higher education (Proposed Postgraduate Studies) and training (Training Program for Local Government Executives) based on the needs assessment and the development of empirically based policy proposals, focusing on seven main pillars: 1. Political Stability and Quality of Regulatory Mechanisms, 2. Efficiency of Governance, 3. Sustainable Development and Environmental Protection, 4. Social Policy and Improved Insurance Systems, 5. Determinants of Sustainability, 6. Sustainable Development, Agricultural Products and Public Health, 7. Tourist Product and Development in Crete. This paper includes a tentative analysis of the basic outcomes of this large research process.

RESEARCH METHODOLOGY

The diagnosis of the needs and shortcomings at the level of the Region of Crete in the above-mentioned areas of sustainability, regional governance and innovation contributes to the optimal establishment of research-oriented policy proposals aimed at promoting sustainable regional development, which is expected to contribute further to the improvement of living conditions and to develop principles such as environmental protection and sustainability, which are necessary for the realization of the above-mentioned pillars of regional development. This particular investigation, which was based on both secondary quantitative and primary qualitative and quantitative research {through a triangular methodological strategy (qualitative research-diagnosis of needs and two quantitative surveys)}, allowed the export of reliable and useful conclusions that led to the development of policy proposals, which attempt to meet the needs of the Region, aiming to offer innovative development solutions. The latter are expected to improve the state of affairs in the Region of Crete, contributing effectively to addressing existing problems and identified needs.

The first quantitative research aimed to evaluate and prioritize the policy strategies of the Region of Crete in the areas of Health, Environment and Agricultural Policy. It was conducted through telephone interviews using the C.A.T.I. system [18] (Computer Aided Telephone Interviewing) based on a structured electronic questionnaire [19]. The interviews were conducted on both men and women, residents of Crete, aged above 18 years old. The sample size was n=600 interviews and was representative of the population, based on the 2011 census, with proportional distribution to the Municipalities and Regional Prefectures of Crete. Both the citizens' satisfaction with existing policies and the current situation, as well as the degree of priority that citizens attach to each of the different axes of the sectoral policy strategies, have been addressed as continuous variables and an 11-point Likert scale (0-10) was used [20].

The second quantitative research aimed to evaluate the policy strategies of the Region of Crete in the area Tourism. It was conducted through telephone based on a structured electronic questionnaire [19]. The interviews were conducted on both men and women, residents of Crete, aged above 18 years old. The research was conducted in three phases and the total sample size was n=2925 interviews. It was representative of the population, based on the 2011 census, with proportional distribution to the Municipalities and Regional Prefectures of Crete.

The qualitative research was conducted in institutional representatives of Crete and included 16 semi-structured as well as 4 narrative interviews (four per semi-structured and one narrative interview per Regional Prefecture). The questionnaire of the semi-structured interviews included five topics (introductory remarks, biographical details, regional development issues, regional governance issues and the concluding remarks) and forty one questions. Both semi-structured and narrative interviews aimed at identifying the opinions, challenges, drawbacks, proposals and good practices from the regional policy makers-institutional actors' representatives in the fields of regional governance, sustainability, innovation and regional development prospects.

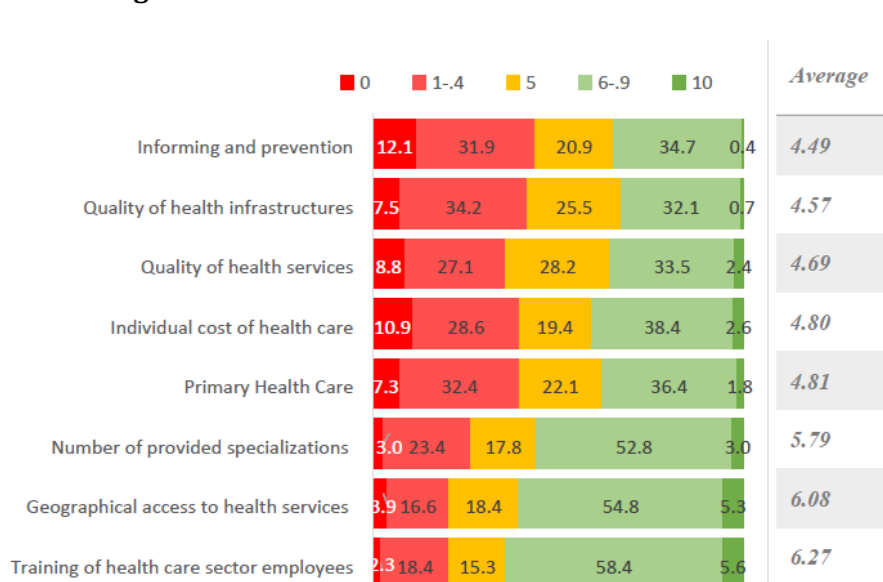
KEY RESEARCH FINDINGS: DETERMINANTS, DIMENSIONS AND PRIORITIES OF REGIONAL POLICY AT CRETE, DURING THE CRISIS

The economic crisis that hit the global economy has left its most visible impact, especially in the countries of southern Europe. Greece is a prime example, as it has been hit harder by the financial crisis and is still in recession. On the basis of the available statistics, the impact of the economic downturn is clearly reflected in rising unemployment rates, and in particular youth unemployment, as well as a significant reduction in citizens' income and, consequently, the

deterioration of their living standards [21]. This combination is a stepping stone to maximizing the risk of poverty and social exclusion, particularly among vulnerable social groups, while increasing the difficulty of implementing public policies at the central and regional level. Therefore, it should be noted that the implementation of central and regional policies has been greatly influenced by budget cuts, resulting in a reduction of the ability to meet the specific needs of local communities. Therefore, it is evident that in various public policy levels the satisfaction of the citizens in Crete is negative.

Citizens and representatives of regional institutional actors, although generally satisfied with Regional Governance at Crete (as evidenced by quantitative and qualitative research), are still experiencing the consequences of the crisis and the frequent failure of the Central State to respond effectively to their needs, especially regarding major social services. In this respect, with regard to health policy issues (which essentially involve policy design and implementation at central level), there is a significant lack of prevention policies and insufficient provision of primary health care. At the same time, satisfaction with the quality of health services and facilities is particularly low, while high individual participation costs are a basic constraint for addressing health needs.

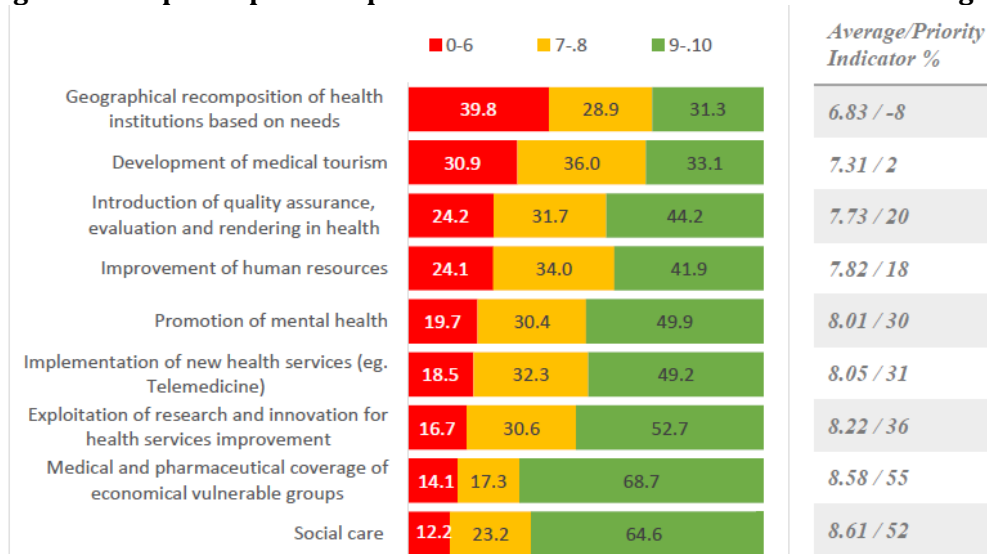
Figure 3: Citizens’ satisfaction index on health care



Source: [22] Authors’ compiled data sets using data from deliverable 3.2c. Available online at: <http://governance.soc.uoc.gr/wp-content/uploads/2017/01/D.3.2c.pdf>

Exploring the degree of priority that citizens attach to each of the policy parameters in the field of health care, the need to create a social protection and care network for vulnerable population groups is clearly highlighted. Specifically, the parameters concerning social care and care for medical-pharmaceutical coverage of vulnerable social groups show the highest averages, while the Priority Indicator (+ 52% and + 55% respectively) is significantly higher than in all other parameters. Moderate priority is given to the use of research and innovation to improve health services, to the introduction of new ways of providing health services and to the promotion of mental health, while human resource development and the introduction of assessment and accountability systems are low priority factors. Finally, the development of medical tourism is positive but show almost zero intensity and the reassignment of health units to needs is negative, which is in line with the relatively high degree of satisfaction of the citizens from geographical access to health infrastructure.

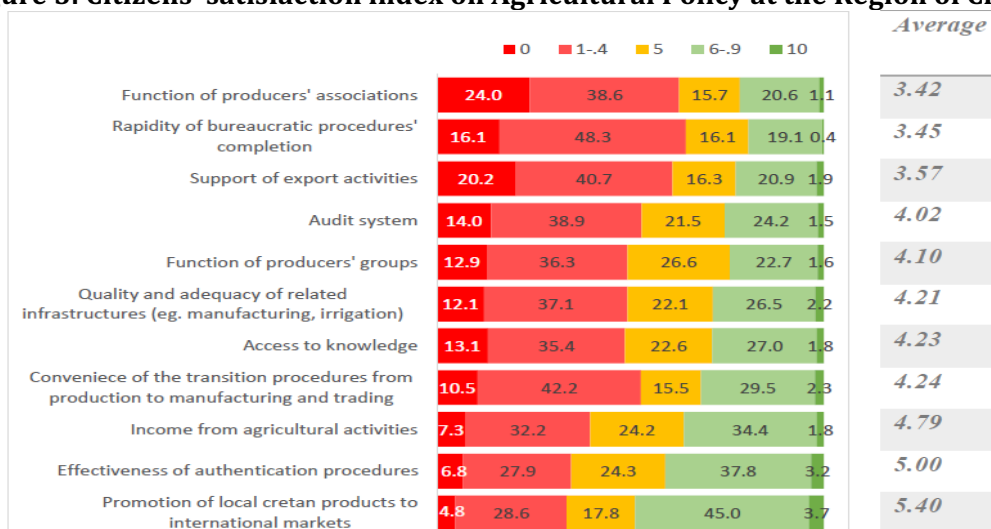
Figure 4: Proposed political priorities on the health care sector at the Region of Crete



Source: [22] Authors' compiled data sets using data from deliverable 3.2c. Available online at: <http://governance.soc.uoc.gr/wp-content/uploads/2017/01/D.3.2c.pdf>

Agricultural production is one of the main development pillars of the regional-local economy and therefore, it is necessary to strengthen the areas where lags are indicated. The three areas with the highest average satisfaction are; the promotion of local Cretan products, the effectiveness of product authentication processes and the income from agricultural activities. However, at a much lower rate of satisfaction is the support for export activity, the speed of completion of procedures related with public institutions and, finally, the function of producers' associations / cooperatives which is definitely a factor that is also involved in export activity. Therefore, there is a need to intervene in the sectors linking production with manufacturing and marketing as well as reducing bureaucratic procedures in order to improve the export efficiency of local products.

Figure 5: Citizens' satisfaction index on Agricultural Policy at the Region of Crete

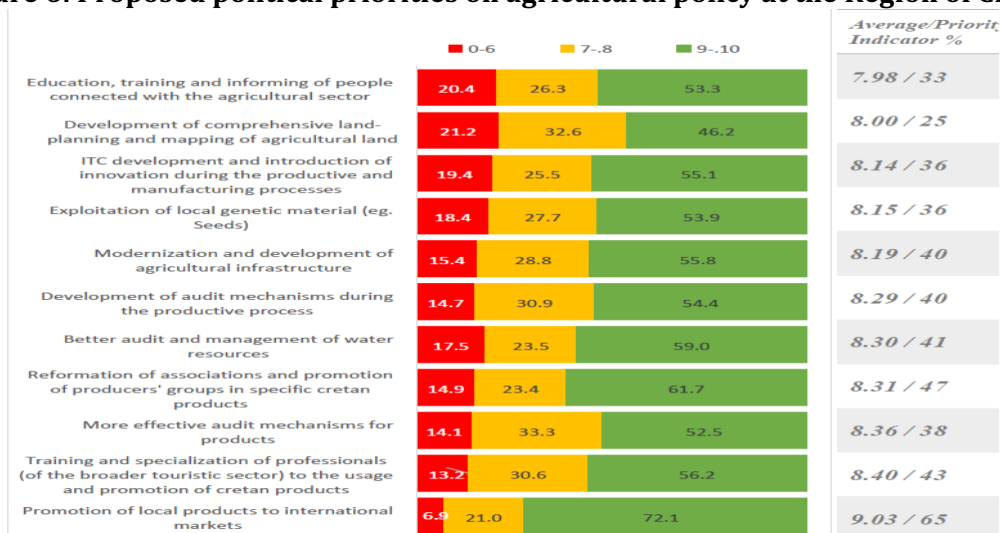


Source: [22] Authors' compiled data sets using data from deliverable 3.2c. Available online at: <http://governance.soc.uoc.gr/wp-content/uploads/2017/01/D.3.2c.pdf>

All concerns proposed in the field of Agricultural Policy, especially at the level of political strategy of the Region of Crete, receive relatively high priority. This shows the importance of

this sector in the economic and professional life of the region and the response of the existing regional planning to citizens' needs. As a first priority, the promotion of local Cretan products emerges, as it is directly linked with the surplus value of agricultural products and, consequently, with the income from agricultural activities. The reorganization of unions / associations and the promotion of producers' groups in key Cretan products seems to be a priority both because of the current poor structure of the sector and because of the cumulative power it gives to the producer amid a highly competitive environment. The least priority is given to the promotion of spatial planning and agricultural land-planning, however, it should not be underestimated that these factors are decisive for the development of the touristic sector, as demonstrated by the findings of the qualitative research.

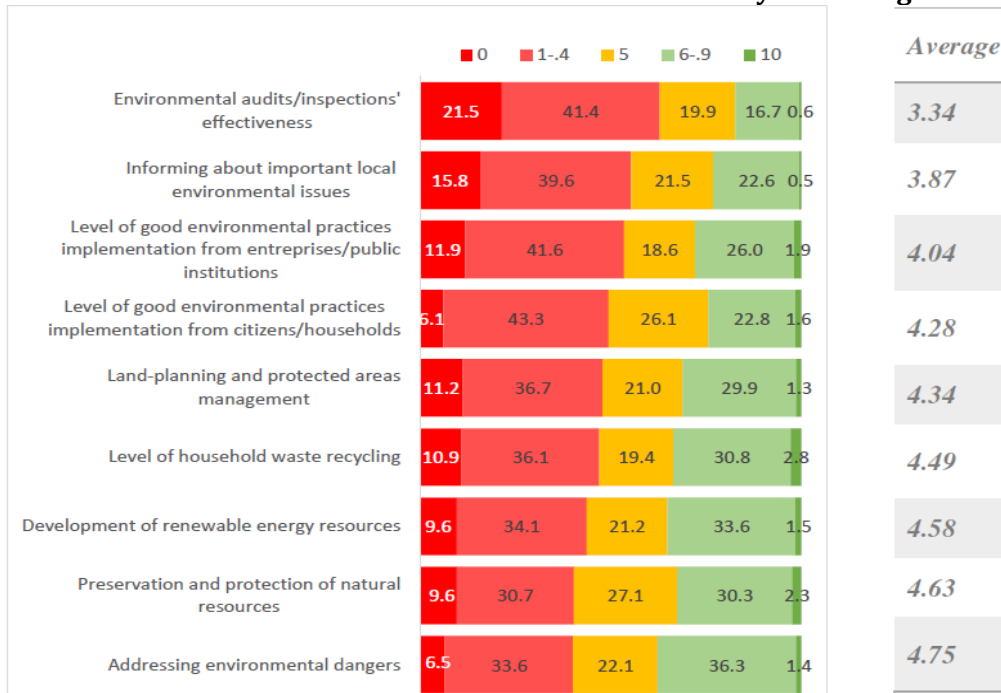
Figure 6: Proposed political priorities on agricultural policy at the Region of Crete



Source: [22] Authors' compiled data sets using data from deliverable 3.2c. Available online at: <http://governance.soc.uoc.gr/wp-content/uploads/2017/01/D.3.2c.pdf>

At the level of environmental policy, the vast majority of citizens appear unsatisfied in several of the specified parameters. It is clear that no average exceeds the mean value of the scale (5), while relatively large percentages appear at its low end (0). The highest levels of dissatisfaction include the major environmental problems of the region and the effectiveness of environmental inspections and audits, highlighting the need for local and central policy intervention to enable citizens to acquire the necessary knowledge and information and to strengthen the audit capability.

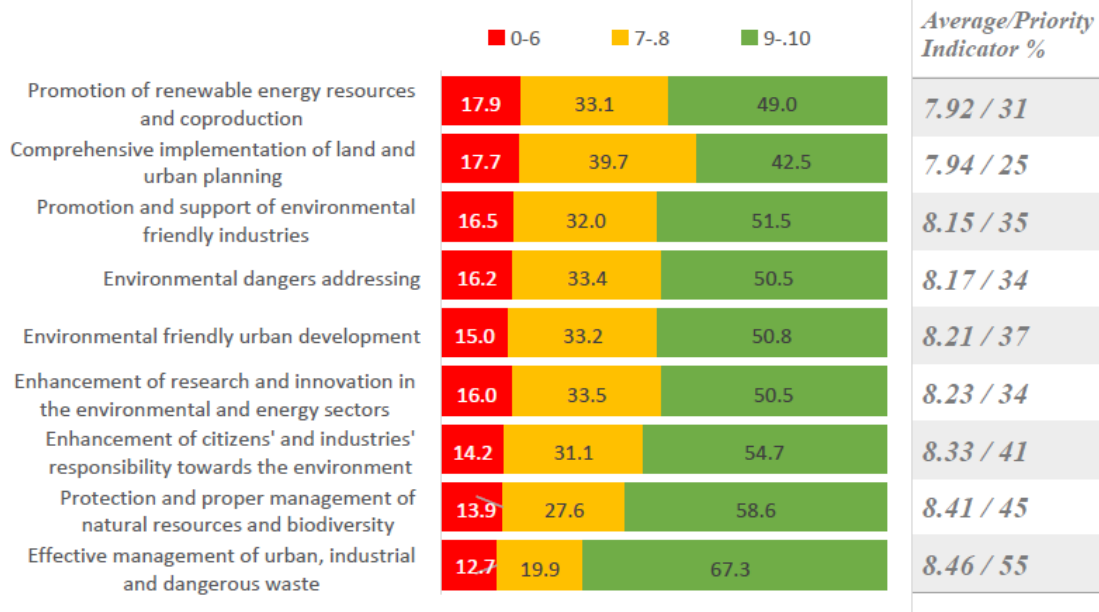
Figure 7: Citizens' satisfaction index on Environmental Policy at the Region of Crete



Source: [22] Authors' compiled data sets using data from deliverable 3.2c. Available online at: <http://governance.soc.uoc.gr/wp-content/uploads/2017/01/D.3.2c.pdf>

Reflecting the low level of satisfaction with environmental policy, the proposed policy initiatives at the level of strategic planning of the Region of Crete are necessary, showing, consequently, a high priority. The highest level of priority is given to the effective management of urban, industrial and hazardous-dangerous waste, while close to the same intensity is the protection and proper management of natural resources and biodiversity, strengthen of the citizens' and enterprises' responsibility towards environmental issues, strengthen of research and innovation in the fields of environment and energy, urban environmental friendly development, environmental hazards, and promotion-support of industrial practices that implement environmentally friendly practices. The lower priority is given to the promotion of urban land-planning as well as to the renewable energy resources and coproduction. However, it should be noted that the Priority Indicator shows medium to high intensity.

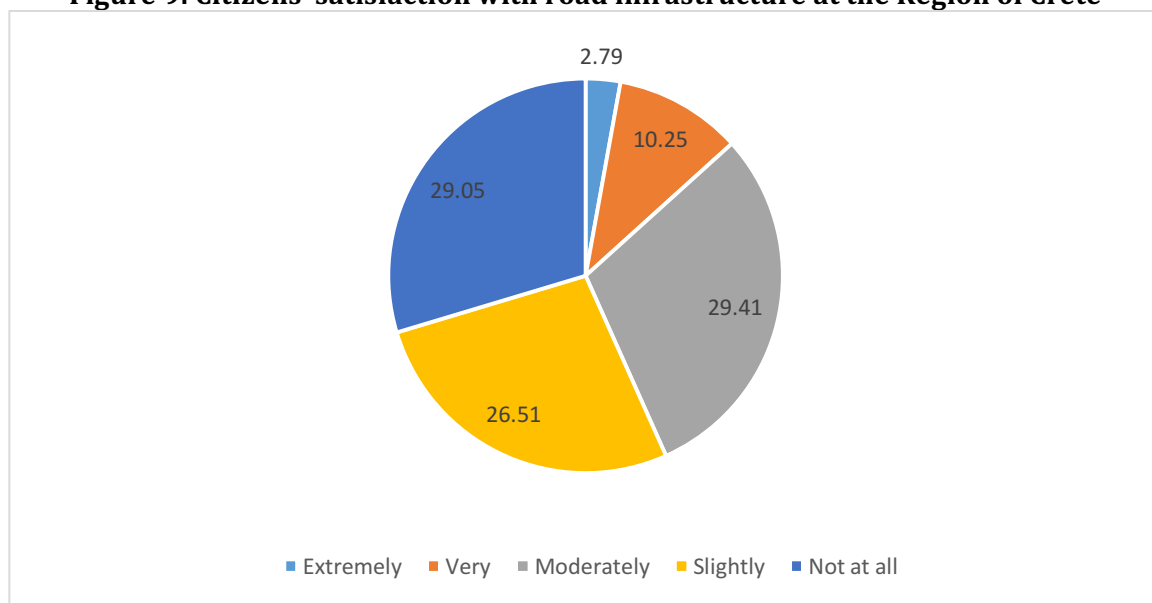
Figure 8: Proposed political priorities on environmental policy at the Region of Crete



Source: [22] Authors' compiled data sets using data from deliverable 3.2c. Available online at: <http://governance.soc.uoc.gr/wp-content/uploads/2017/01/D.3.2c.pdf>

It should also be stressed out that for the majority of respondents, the lack of modern infrastructure (e.g. airports, modern highways) is an inhibiting factor for the further development and strengthening of tourism in Crete, as well as for the improvement of life quality. Particular focus is given to the poor condition and the danger of the road network, as long as 87% of the Cretans appear indifferent to the condition of the island's road network and, above all, of the Northern Highway of Crete (BOAK) which they consider dangerous and unacceptable for an island with high levels of tourism. Although most of the previous issues raised by citizens are related to structural inefficiencies in the response of the Central State to existing major problems in Crete, the intensity expressed from the citizens, can indisputably be used as a pressure lever of the Region of Crete towards the Central State authorities for the implementation of more effective solutions.

Figure 9: Citizens' satisfaction with road infrastructure at the Region of Crete



Source: Authors' compiled data sets using data from deliverable 2.4. Available online at: <http://governance.soc.uoc.gr/wp-content/uploads/2017/01/D.2.4> See also [23]

In conclusion, based on the above-mentioned findings, it turns out that the current economic downturn has caused a general dysfunction in the local community, by increasing the problems on specific policies' implementation. Consequently, it is more necessary than ever to develop an integrated and empirically based strategic framework to promote and enhance regional growth that will assist to the improvement of citizens' socio-economic indicators. This plan should include a strategy which should aim at strengthening the core social policy pillars such as health care as well as the environmental and the agricultural pillars. The ultimate aim should be to improve the living conditions and address social problems, promote economic growth, increase employment prospects and simultaneously protect the environment through public interventions as well as enhancing citizens' knowledge.

SYNTHETIC ANALYSIS

The outcomes of the primary qualitative and quantitative research revealed numerous crucial issues regarding the needs and problems at the Region of Crete related to the fields of governance and sustainable development, as well as to the connection of regional and central policies. Specifically:

- i. **Competitiveness of Regional Economy:** Our analysis shows that Crete has a number of competitive advantages but appropriate concerted approach should be taken to utilize the necessary regulatory actions in order to overcome the structural and bureaucratic problems and to establish effective cooperation and coordination between all actors in order to prioritize and find beneficial solutions. It also emphasizes on the necessity for effective cooperation between the primary sector of the economy and the touristic sector in order to accomplish better promotion for the local products.
- ii. **Citizens' Satisfaction from Public Policies:** The findings show that citizens are highly disappointed with the implemented public policy at the level of the central government. The main reason include the austerity measures which were actually implemented during the economic crisis as well as the failure of the central administration to find solutions to issues related to social development, entrepreneurship and welfare. On the contrary, there was clear satisfaction with the level of regional policy implementation and strategic planning. However, the above-mentioned disappointment often overlooks the remarkable efforts of the Region of Crete.
- iii. **Health Sector:** Based on the results, it appears that there is relatively high satisfaction with the provision of the Primary Health Care services, geographical access to health infrastructure and training of human resources. However, this is overshadowed by the apparent shortages in the infrastructures and by the lack of further development of the human resources on health units. In addition, it turns out that the cost of participation in health sector affects the high priority which should be given to the creation of a comprehensive healthcare network for vulnerable social groups.
- iv. **Environmental Policies and Renewable Energy Sources:** The results of our analysis show the necessity to maintain environmental sustainability and to promote actions and strategies that will contribute to the protection and optimal use of natural resources. In this sense, the expressed anxiety of respondents is expressed by the limited satisfaction on the current environmental policies at national and regional level, and by the lack of information and training both of the citizens and some of the institutional actors' representatives, as regards to environmental issues and renewable energy sources.
- v. **Agricultural Policy:** The participants expressed their dissatisfaction about the general functioning of the central state in terms of agricultural production process reinforcement and strengthening the promotion of agricultural products. The main causes include the extensive bureaucracy, inadequate export support, the inefficient system of inspections and audits, the grinding authentication process and the lack of infrastructure. However, citizens acknowledge that efforts have been made, especially

- at regional level, in order to promote agricultural products and advocate their continuation and further strengthen as priority, underlining as well the necessity of agricultural associations' restructuring.
- vi. The Touristic Sector: Tourism is the most important sector of the Cretan economy. The quantitative and qualitative findings have shown that the touristic sector in the Region of Crete is at better level than in the other Greek regions, while actions to promote the international image of Crete seems to be satisfactory. However, as the research findings suggest, there is room for further improvement in the field of Cretan tradition and gastronomy promotion as well as in the infrastructures, in order to enhance the image and the constituent components of the "brand name" of the island. In order such a strategy to be considered as feasible, there should be close cooperation of the touristic sector with the primary economic sector in order to find mutually beneficial solutions.
 - vii. The Institutional Framework of Regional Governance: It is widely accepted that the modernization of the administrative model of local government, implemented through the 'Kallikratis' project, has produced positive results in terms of effectively solving local problems and needs. However, the findings from the analysis of the qualitative and quantitative data revealed some important problems related both to the lack of resources and to the overlap as well as vague allocation of responsibilities between the regional units and central regional services.
 - viii. Regional Governance in Crete: Based on the results, it appears that citizens have a significantly higher rate of satisfaction in a wide range of regional policy areas rather than of the central government. Particularly, the skills of the regional staff are assessed more positively. However, the necessity which is expressed by the respondents in the qualitative research include the implementation of continuing training and education programs in the new technologies, the management of European programs and the (further) development of administrative and social skills. On the other hand, civil society associations do not seem to be able to respond adequately to an enlarged social and intervening role, due to the serious economic problems that people encounter. Despite the efforts by the regional agencies, which appear to have made a significant contribution, it is not possible the gaps at the level of social policy to be completely covered by the local and regional authorities, especially after seven years of continuing economic crisis and austerity which has increased social needs and reduced public funds. Furthermore, the respondents of the qualitative research stress out that it is extremely important both central and regional authorities, to introduce new plans for the construction of important infrastructures such as roads, highways and ports, as well as for the renovation and improvement of the existing ones. They propose that their funding could use European funds as well as private investors through partnerships or concessions. Additionally, strengthening the role of social dialogue in Crete, will enable a real self-governing region, capable of producing resources and having its own revenues. At the same time, the utilization of the scientific knowledge for the diagnosis of needs assessment in the fields of tourism and other sectors, promoted and supported by the region of Crete, constitute a potential contributor for sustainable development.

POLICY PROPOSALS AND CONCLUSIONS

From the comprehensive analysis of the quantitative and qualitative research results a set of policy proposals has been constructed, which aimed at strengthening regional governance, that is a key pillar of governance efficiency improvement as long as it reinforces the implementation of policies that contribute to a faster and more consistent solution to the problems. At the same time, coordination, simplification of bureaucratic procedures and clarification of responsibilities between central and local government, giving emphasis on decentralization, is a policy pillar that promotes the effectiveness of policies for the benefit of

local and regional societies and economies. In addition, within this framework, training and education of local government officials becomes critical. This criticality is even more remarkable given the importance of these actions, but also the impact they have on efficiency and the improvement of their professional competence, improving both the existing human capital and the conditions for its development [24].

It should also be noted that the main objective of local governance should be the improvement of social well-being, in order to efficiently address crucial social problems and cover the gaps of the central public policy in terms of social protection. Therefore, efforts that could support social development and integrate the socially vulnerable should be enhanced by local and regional authorities, as the respondents in the qualitative research point out. As a result, they are highlighted as key priorities not only because of their multidimensional and structural importance for the well-being of society, but also because of the apparent weakness of the central state in coping with negative social consequences of the economic crisis. These interventions could also help strengthening civil society, social entrepreneurship and corporate social responsibility.

Finally, an equally important priority is to promote and support local entrepreneurship. This sector in the Region of Crete is multi-level, because it involves the touristic sector as well as the promotion of the products of the primary sector. With the aim of the development of these economic pillars, it turns out that the starting point should be to align them with the principles of sustainable development and the use of renewable energy sources.

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A Study Of Labour Turnover And Organisational Productivity In The Cable Industry Of Nigeria Manufacturing Sector

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ABSTRACT

The paper focused on the role of labour turnover in organisational productivity in the manufacturing sector with reference to cable industry in Lagos, Nigeria with a view to identifying causes of labour turnover and factors in productivity level; elements of organisational policies; and assess challenges confronting the variables. The study provides a framework to explain factors responsible for labour turnover with its implications on organisational productivity as it was found in the cable manufacturing sector of Nigerian economy which has not been previously investigated by scholars. A survey design was adopted, 5 cable organisations were purposively chosen through a preliminary survey of the cable organisations in the three senatorial districts of Lagos State. A sample of 420 employees was chosen from 650 employees representing 65% response rate. The administered questionnaire was designed in line 5 Likert rating scales. It was found that employees' decision to leave and join another organisation is a constant phenomenon in the world of work which is contingent on many variables such as work design, emotional trauma, location and organisational politics emanating from organisational policies etc. and the result also showed that there is a significant relationship between labour turnover and productivity level of organisation at 0.05 level of sig. It showed that work factors, environmental factors, personal factors as well as organisational policies factors are the basic components of labour turnover with degree of influence on the organisational productivity.

Key Words: Labour turnover, productivity, environmental factor, work and personal factors, job enlargement and enrichment

INTRODUCTION

The increasing complexity of business at all facets of its activities in various industries in Nigeria made a research into labour turnover an indispensable part of organisational development towards achieving its primary objectives i.e to survive, to grow and make profit and for such dream to be actualised, productivity should not be relegated but given highest consideration (Akinwusi, 1989). Thus, the survival of any organisation largely depends on their level of productivity which is believed to be the life-wire of all organisations without exception (Oginni, 2011). It is therefore imperative to understand what should be done to maintain and increase productivity which remains the greatest concern of every organisation and for these wishes to be realised, there is need for something inform of investment from which movement out of the organisation could be reduced to maintain relative stability in the workforce. This is simply because organisations are expected to have certain degree of labour turnover without which the organisation would stagnate or to say that an organisation where nobody leaves nor enters is said to be non-existence (Obisi, 1996). Although in the views of many, labour turnover

is like a double-edged sword or mixed blessing (Graham, 1990. Obisi, 1996, Banjoko, 2000, Fajana, 2011) i.e if it is through a normal process of replacing old employees, it is acceptable but where it is as a result of non-performance on the part of the worker or organisation, then it is not too good as this would affect the career growth of workers as well as their commitment. However, many factors contributed to the increase and decrease in productivity (Akindele, 1999), but the major concern here was the human resources factor with a projection that a judicious use of this factor would help to maintain, motivate, and reduce whatever might be the effect on the organisation and subsequently meet both primary and secondary objectives of the organisation thus strengthening the rationale behind the essence of joining, identifying and remaining with organisation.

Statement of Problem

All the activities of any organisation are initiated and determined by the people who make up that organisational plants, offices, computers and automated equipments for meaningful results i.e all these elements found in the modern organisations are unproductive without human efforts through effective interaction. The implication of this on organisational activities is to ensure effective utilisation of this human resources factor by aligning organisational objectives (profit, growth and survival) and employees' objectives (career, job security and societal status) thus bringing about a sort of investment on the human resources factor in order to maintain a relatively stable workforce. However, business organisation in Nigeria are undergoing distress in response to global economic and financial meltdown as well as governmental policies developed in furtherance of economic recovery thus forcing many organisations to adopt different strategies (reorganisation, restructuring, rationalisation, downsizing, rightsizing, retrenchment, merger and acquisition) as a way to cope with the situation and at the end serving as obstacles to also make available welfare packages and work environment that might induce workers to show the desire to stay on the job. In the same vein, it is equally this economic distress that made workers to constantly seek alternative job in order to meet ends meet. Sequel to all these is instability in the workforce which has the propensity to disrupt production, services and in all organization productivity. Hence, the need to investigate the role of labour turnover in organisational productivity level in order to ensure operation on-going concern since the productivity of an organisation depends on the skills or expertise of its workforce with relatively stable personnel or workforce.

Objective of the study

The rationale behind the study was quite explicit through the focus of the paper i.e the roles of labour turnover in organisational productivity, however within this broad objective were other specific objectives that provided platform for actualisation of the overall objective to include;

1. identify causes of labour turnover and factors in productivity level (increase and decrease)
2. examine intrinsic and extrinsic elements of organisational policies vis-a-vis provision of facilities made available on labour turnover and productivity.
3. investigate the role of labour turnover in the organisational productivity with respect to the cable industry of the manufacturing sector.
4. assess various challenges confronting labour turnover and organisational productivity.

Research Questions

To effectively evaluate and understand the direction and issue into which research is being carried out, the following questions were raised;

1. What are the factors responsible for labour turnover?
2. What are the factors responsible for increase and decrease in productivity level?

3. Of what significant are the intrinsic and extrinsic elements of organisational policies and facilities on labour turnover and productivity?
4. What is the relationship between roles of labour turnover in the organisational productivity with respect to the cable industry of the manufacturing sector?
5. What are the challenges encountered in the labour turnover and productivity?

Scope of the study

The entire work of this research was concentrated on employees of the cable industry in Lagos ranging from management, senior to junior staff of the cable industry in Lagos in order to determine the roles of labour turnover in organisational productivity.

Significance of the study

In course of determining the roles of labour turnover in organisational productivity, the work revealed an explicit insight into the trend of labour turnover in the cable industry thus providing reasons behind decision to stay or leave in relation to the role played by compensation policies, leadership composition and environment, motivational factors as well as human resources management practices emanating from policies of the organisation. Insights were also provided into the factors that made productivity to increase and at the same time decrease.

LITERATURE REVIEW

One of the characteristics of modern organisation is continued existence of organisation by operating on-going concern whereas employees may not have continued working relationship with organisation i.e it is somewhat natural for employees to leave an organisation after sometime with or without reasons (Akindele, 1999). The process of leaving and replacing employees over a specified period of time usually a year or more than a year is known as labour turnover (Akindele, 2007). In the views of Flippo (1980) this can be described as the movement into and out of an organisation by the workforce and to him this movement is an index of stability of that workforce. Obisi, (1996) regarded labour turnover as the coming in and going out of employees over a measured period say in a month or a year. He went further to say that if some employees leave an organisation and some people joined the organisation to fill the position vacated then labour turnover has taken place and could be as a result of many reasons, incidents and factors. Graham was of the opinion that labour turnover is the movement of people into and out of the firm. To him it is usually convenient to measure it by recording movement out of the firm on the assumption that a new employee eventually replaces a leaver for any reason. However, the views of Adebayo, Ajayi & Oginni (2013) was different to what the above scholars adduced forward to describe what labour turnover is all about. In their views, labour turnover is strictly movement out of an organisation with the intention to join or not join another organisation. The argument was based on the fact in the developing economy like Nigeria it is not always a direct relationship i.e replacing every employee that left the organisation more so that the economic situation put pressure of the organisation to utilise resources to the maximum. When an employee leaves, what follow is adjustment to merge the vacuum created except a sensitive position which is taking over by next in hierarchy pending the appointment of another to fill the vacancy.

The rate of turnover varies from organisation to organisation as well as region to region and the highest number of turnover recorded in Nigeria is the private sectors unlike the public sector which enjoys relative stability (Oginni, 2011) and the reasons behind this labour turnover were many out which few were mentioned availability of alternative employment was identified by Ubeku, (1975) which also corroborated the views of Hyman (1970) that the existence of job opportunities within the economy acts as a pull factor in workers' decision to

change jobs. Flippo (1980) identified errors made in the placement and orientation to be another source of causes which was also supported by Akinnusi (1989) and added mismatch of personnel to jobs. Fajana (2011) linked God Fatherism to the problem arising from improper placement of mismatch of personnel to jobs which end result is frustration causing on timely departure from the organisation. To Obisi (1996) unhappiness, relationship with management and work environment evolving from the job and individual interaction were another sources of labour turnover. This view was supported by Cameron (1994) and added managerial inefficiency leading to frustrating and demoralising for dedicated employees to sit around waiting for work while management engages in interplay of work activities. Also, variables such as the state of the economy, the nature and characteristics of the job, wage structure, demographic characteristics of individual in the environment unrealistic expectation, poor candidate screening, compensation issues job-scope, work tools and job security were identified as potential causes of labour turnover (Williams et al, 1994, Jackson, 1981 and Stear, 1991). These identified causes according to Banjoko (2000) can be classified into two namely pull and push factor and Ruby (2002) added another dimension to it by adding internal and external. The pull factors are those variables that are outside the organisation attracting employees to leave their present jobs while the push factors are the variables within the organisation propelling employees to leave their job. Fajana (2011) classified it into two as voluntary and involuntary.

It is logical to say that labour turnover can be extremely devastating for any organisation as a result of their inability to maintain steady and balance workforce. However, the cost associated with labour is enormous ranging from loss of goodwill, leakage of information to competitors by departing employees, loss of investment on the departing employees in terms of training, disruption in work process and plan, cost incur in recruitment exercises, diminishing organisational effectiveness, loss of job-specific skills, conflicting organisational culture and to increase in scraps (Stear, 1991, Ovadge, 1998, Testa, 2008, Ubeku, 1975, Chruden, 1980, Mobley, 1982, Shaw et al, 2001, Fajana, 2011). In the same vein, it also has effect on employees such as loss of wages, loss of societal respect and prestige, suffers career advancement and emotional trauma (Armstrong, 1993). Although the effect is devastating, it is also beneficial in some ways such as injection of fresh blood with new ideas, room to ensure and facilitate promotion, training need arises for members of the organisation and get rid of unproductive employees (Abelson, 1987). The above effect clearly depict the views of Obisi (1996) when he said that there is gain in movement of employees out of the organisation as no organisation can exist without iota of labour turnover but such movement should be watched and monitored. This was equally illustrated by the work of Graudet (1958) on what top management does not know about turnover in Banjoko (2000) through the use of Fahrenheit measurement as a clinical thermometer to draw his analogy i.e a high temperature may mean pneumonia, measles or mumps and also a below normal reading on the thermometer can also be a danger signal. Bolton (1991) provided a simple method by which this can be measured or calculated i.e labour turnover is equal to the number of employees leaving divided by the average total number of employees multiplied by 100 since it is usually expressed in percentage and the number of employees leaving are measured over one calendar year.

Productivity

In the views of Maertz et al (1998) productivity is the measure of an organisation to achieve its targeted production with the means of workforce, authority's strategies, machineries, equipments and assets. To Harper (1982) productivity is a measure of output from production process, per unit of output. In a nutshell, it is a ratio to measure how well an organisation converts input resources into goods and services (Saari, 2006). Mayabeo and karmarkar (1962) in Obisi (2005) productivity is described as the ratio between the production of a given

commodity measured by volume and one and more of the corresponding input factors which measured by volume. However, the views of Benson, (2002) differ as result of his perspective on what productivity is all about. He believed that productivity means an organised mass attack on waste of every type and in every sphere. Benson (2002) went further that it implies development of an attitude of mind and a constant urge to find better, cheaper, quicker, easier and safer ways of doing a job, manufacturing an article and providing service. A deeper examination of these showed that the process of productivity imbibed the concept of effectiveness and efficiency, labour (skilled and unskilled), raw materials and other factors of production. Therefore, productivity is getting it right the first time by ensuring effectiveness and efficiency in process, man and material.

This just explains why many scholars were of the opinion that productivity depends on several factors such as motivation, talent, training, work environment, support from others, time management, luck, land, competent workforce, leadership, political stability, reward strategies, social stability, security, law and legislation, supervision, environmental factors, international factors, technology factors, planning and communication (Obisi, 2005, Adamu, 2015). However, in the opinion of the authors, all these factors can be classified into three categories namely personal factors, work factors and environmental factors. It is these factors that made productivity to be a deliberate effort to build integrity, value and transparency in an organisational culture in order to create enabling environment for the workforce that would induce productivity in organisation and where these factors are positive, to maintain stability in the workforce of any organisation will not be difficult (Penrose, 1980).

Challenges of Labour turnover and productivity

Out of all the factors mentioned above, it is the “man” that receives greater attention as the chief component of the variables affecting productivity. This is because man is the most dynamic and unpredictable element thus making it difficult for adequate planning of this resource when compared with other variables that were relatively static in nature except with man interaction. Similar to this is the head haunting or poaching of qualified and competent employees as the case may be on the part of the competitors. This is a deliberate attempt on the part of the competitors to lure qualified and competent employees away from their present place of work with mouth watering compensation package and since employees are economic human being there is always that temptation to leave their present job and join the new one (Obisi, 2005, Chruden (1980) and Fajana, 2011). The departure of an employee from an organisation would create vacuum in the job process and thus affect time taken to complete the work and when eventually replaced, the time it will take to acclimatise to the organisation and its culture, waste in materials and time in decision making, advertisement financial implications due to recurring of replacement of the departed employees. Another major challenge is poor compensation package that is being described in Nigeria as total take home which upon critical examination, it cannot take one to the gate of the organisation talk less of the home and the implication is unwarranted movement on the part of the employees seeking a better compensation package by vividly relying on the information provided either by friends, associates or grapevine discussions (Adamu, 2015). Organisations are equally handicapped to offer attractive compensation package as a result of economic recession presently prevailing in Nigeria thus compounded the stability of workforce and steady productivity devoid of unwarranted (Obisi, 1996). An aggrieved departing staff can put employer at bad light and lure other employees out of the organisation. This additional turnover caused by departing staff can result to difficulty in employing good employee and thus hampering the productivity of such organisation (Benedict, 2012).

METHODOLOGY

The paper relied on both primary and secondary data. Primary data were collected through a structured questionnaire which was administered personally in a face to face situation to the employees of the cable industry in the manufacturing sector of Nigerian economy by the researchers in the three senatorial districts that constitutes Lagos, Nigeria where each of the researchers covered a district. The population of study consists of 5 cable organisations obtained through a preliminary survey of the cable manufacturing organisations in the three senatorial districts of Lagos state namely Lagos West, Lagos Central and Lagos East which was based on the number of years of existence with 650 employees and from the employees' number in the organisations based on the preliminary survey, a sample of 420 employees were chosen representing 65% (140 from each of the senatorial district) which was randomly selected from purposively chosen manufacturing organisation in the senatorial districts of Lagos.

A total of 420 questionnaires were administered to the employees in the cable organisations of the three senatorial districts in Lagos over a period of 7 months which was developed in line with Likert five rating points which consists of different questions on personal factors, work factors and environmental factors in order to determine the relationship between labour turnover and productivity. The respondents were asked to express their opinion to each of the dimensions of labour turnover with appropriate score that commensurate with their level of agreement where strongly agree = 5, agree = 4, neutral = 3, disagree = 2 and strongly disagree = 1. The items for measuring labour turnover have been developed based on Schwepker and Charles (2001) as well as Heinonen and Korvela (2003) studies and for reliability purpose Cronbach Alpha was used and the reliability value was 0.925 which was equal to 1 as obtained through the use of SPSS analysis. In all, 397 were returned while 356 questionnaires were found to be adequate for the purpose of analysis thus representing 85% respondents' rate and the secondary data used in the study was obtained from related journals, books, internet etc. and descriptive and inferential statistics were used to examine organizational productivity

ANALYSIS AND INTERPRETATION

Table 1: Demographic Information about the respondents

Variables	Frequency distribution	Percentage
Gender		
• Male	215	60%
• Female	141	40%
• Total	356	100%
Marital status		
• Single	115	32%
• Married	235	66%
• Divorced	6	2%
• Widow	-	-
• Widower	-	-
• Total	356	100%
Educational level		
• M.Sc / MBA	37	10%
• B.Sc/HND	189	53%
• ND/NCE	89	25%
• Others	41	12%
• Total	356	100%
Work experience		
• Less than 1 year	22	6%
• 1-3 yrs	88	25%
• 4-6 yrs	178	50%
• 6 yrs and above	68	19%
• Total	356	100%
Age limit		
• Less than 30 years	60	17%
• 31-40 years	145	41%
• 41-50 years	109	31%
• 51 and above years	42	12%
• Total	356	100%

Source: Field Study, 2018

Table 1 above showed the demographic characteristics of the respondents which was sought in order to determine the suitability of the respondents in terms of maturity, emotional stability, knowledge and experience for reliability on the outcome of the research work. The table showed that in the gender category, male with 215 respondents representing 60% of the population were the majority. In the same vein of the majority were married respondents with 235 representing 66% of the population, first degree holders with 189 representing 53% of the population, 178 respondents representing 50% were also the majority with respect to the number of years spent in their present organisation and in the age limit category, 145 respondents representing 41% were within the age bracket of 31-40 years to be the majority. Overall, the implication is that the respondents are matured, educated, qualified to understand what the questions in the questionnaire were all about and could be deduced that the respondents are emotionally stable going by the ratio of divorce and married respondents. The percentage recorded for age and work experience showed that the respondents can adequately comment on the issue at stake with reference to their daily activities and knowledge about their respective organisation.

Table 2: Percentage of labour turnover and organizational productivity

	PF	WF	EF	OF
Strongly agreed	43.3	51.1	23.2	24.7
Agreed	23.2	15.2	45.5	17.3
Neutral	6.1	18.4	12.3	18.6
Disagreed	16.4	9.5	10.4	21.1
Strongly disagreed	11	5.8	8.6	18.3
TOTAL	100	100	100	100

Source: Field Study, 2018. Where PF = Personal factors, WF = Work factors, EF = Environmental factors and OF = Organisational policies factors

Table 2 showed the percentage of employees’ responses as well as perspective on different dimensions of labour turnover and organizational productivity. Emerging from the above table 2 is that majority of the respondents representing 51.1% strongly believe in their opinion that work factors has effect on the productivity of an organisation, 15.2% of the respondents were also in support of work factors as a phenomenon that affect organisational productivity, in all 66.3% agreed that work factors has effect on productivity of an organisation while 15.3% total number of respondents were against the belief that work factors has effect on organisational productivity, thus implying that management of the cable industry should endeavour to make work interesting through appropriate work design in order to avoid losing competent employees so that the effect of it on the organisational productivity would be minimal. Followed by the respondents with 43.3% who strongly agreed that personal factors also has effect on the productivity of an organisation and 23.2% agreed to the belief that personal factors has effect on organisational productivity, in all 66.5% believed that personal factors has effect on the productivity of an organisation. A comparison between work factors and personal factors in terms of respondents’ percentages showed that those that were in support of personal factors were more than those in support of work factors by 0.2% and those that in disagreement about the effect of the variables on productivity were equally not on the same plane i.e 17.5% of the respondents were against work factors while 15.3% of the respondents were against personal factors to have effect on the productivity of the organisation thus creating a margin of 2.3%. A total number of 68.7% respondents agreed that environmental factors has effect on organisational productivity while 19% respondents were in disagreement with the effect of environmental factors on organisational productivity and this particular variable provided the highest number of respondents. The implication is that the management of cable industry should incorporate basic environmental factors into the organic functioning of the organisation. Similarly, 42% respondents were also in agreement with organisational policies as a factor to have effect on the productivity of the organisation while 49.4% respondents representing the highest number to disagree with organisational policies. The implication of this is that most of these respondents were not attributing their decision to leave their present place of work to policies emanating from the organisation rather place their focus on the happenings in the environment, individual perception in relation to balance work life and the work itself in terms of operation and performance.

Table 3: Computation of Z value at 0.05 level of sig. (two tailed test); table value (1.96)

Organizational Productivity	N	Mean	Standard Deviation	Standard error	Z Value (calculated valued)	Mean Rank
Personal factors	356	55.4	14.3	0.12	1.43	1
Environmental factors	356	45.2	12.7	0.13	1.64	2
Work factors	356	38.6	10.8	0.12	1.08	3
Organisational policies factors	356	42.4	14.2	0.11	2.47	4

Source: Field Study, 2018

Table 3 showed that personal factors has calculated value ($Z = 1.43$) and the table value (1.96) which means the tabulated is greater than the calculated i.e. ($Z_{tal} > Z_{cal}$). This implies that personal factors would have significant effect in the productivity of an organization. Environmental factors calculated value ($Z = 1.64$) and the table value (1.96) indicates that the calculated is less than the tabulated i.e. ($Z_{cal} < Z_{tal}$). The implication is that environmental factors would really have significant effect on employees' decision to leave their present organisation and thus affecting the productivity of an organisation. With respect to work factors, the calculated value ($Z = 1.08$) and the table value (1.96) thus, the tabulated is greater than the calculated i.e ($Z_{tal} > Z_{cal}$) therefore work factors has significant effect on employees' decision to leave their present organisation and thus affecting productivity of an organisation. For organisational policies factors, calculated value (2.47) and the table value (1.96) which means that the calculated value is greater than tabulated value i.e ($Z_{cal} > Z_{tal}$). The implication is that organisational policies as a factor have insignificant effect on employees' decision to leave their present organisation and thus have minimal effect on the organizational productivity level.

DISCUSSION OF FINDINGS

The demographic characteristics of the respondents showed that the respondents were found to be matured, emotionally stable, knowledgeable and experienced thus establishing the reliability of the respondents' responses as well as the outcome of the research work. Aside this, the percentage analysis of the variables indicated that environmental factors accounted for more in labour turnover than other variables i.e it is the incident in the vicinity and surroundings of business organisation that would contribute more to the intention of employees to quit their present place of work. The incident may be one or combination of these items namely economic issues, cultural issues, pace of technology, direction of government policies, attitude of the competitors, behaviours of community where the business is sited, availability of alternative job, influence of suppliers and stakeholders. All these are propeller to persuade employees to leave and when it happens, the productivity level of an organisation will surely be affected. This outcome is in support of the related work carried out by Adamu, (2015) on the relationship between technology and organisational productivity where emphasis was on the dictate of the environment vis-a-vis technology as found in operation either within or outside the organisation and was also supported by the work of Obisi, (2005) on related work. Another variable that was also found to have relationship with labour turnover was personal factors. The implication of this for the research work is that after environmental factors, it is followed by personal factors which will equally have bearing on the propensity of employees to stay or not to stay with appropriate consequences on the productivity level of an organisation be it service or manufacturing organisations. It may be one or combination of the items in personal factors that might initiate the decision to quit which includes age, experience, relationship, emotional feelings, perception, individual differences, qualifications, integrity, recognition, spouses, family background, children, distance and parental influence. Whenever any of these manifest, the end result might be labour turnover which will definitely affect the productivity of the organisation in no small measure. This outcome was equally supported by the work of Fajana (2002) and that of Chruden (1980). The other factor considered for the research was work factors as propeller of labour turnover which will also have bearing on the productivity level of the organisation. It may be one or combination of the elements in work factors that might initiate the decision to quit which has career path, growth, advancement, promotion, job design (enlargement and enrichment), work arrangement, time schedule for resumption and operation as well as activities in a task. This particular result can be said to be a confirmation of the work of Herzberg on motivation to be relevance to African settings The last variable in the percentage analysis was organisational policies factors which is deeply rooted in the human resources

management practices of an organisation which shows that the state of the economy, non availability of alternative job as well as the survival instincts placed restriction on the organisational policies factors as a vital force that could make employees to contingent their decision to leave thus minimising its effect in the productivity level. This contradicted the views of Kersley et al (1997) that policies in organisation have bearing in productivity growth most especially the manners and styles by which it was communicated to the employees. The reason for the contradiction may be as result of variation in continent and country as Nigeria is developing country.

The result emanating from the Computation of Z value at 0.05 level of sig. (two tailed test) in table 3 on all the dimensions of labour turnover and productivity also confirmed the result obtained from percentage analysis in table 2. It was evident that personal factors, work factors and environmental factors have significant effects on organisational productivity while organisational policies factors have insignificant effect on organisational productivity which may be as a result of peculiarity of Nigerian situation especially the economic situation.

CONCLUSION

The main essence of the research work was to determine the relationship between labour turnover and organisational productivity in the manufacturing sector of Nigerian economy most especially the cable industries. The overall analysis provided a comprehensive description for all the variables in the labour turnover and organisational productivity as well as the views of other scholars that had conducted research earlier in related areas. The results obtained through the use of the research instrument were within the stream line as mentioned by previous scholars thus, revealing that work factors, environmental factors, personal factors as well as organisational policies factors are the basic components of labour turnover with certain degree level of influence on the organisational productivity. It was found that most of the employees agreed that work factors, environmental factors and personal factors significantly affected organisational productivity. It was however found that the policies made available in the cable industries did not propel the present crop of employees in the industries to indicate willingness to leave which implies that the policies will bring about stability in the work force and the effect on the productivity can be said to be minimal. This was inferred from the fact that an employee willing to leave will give notice as specified in the appointment letter and the period could be used to ensure stability.

Therefore, labour turnover is an indicator of organisational productivity level as a result of the existing relationship between the two variables. To this extent, labour turnover is a variable that must be considered in order to maintain and guarantee stability in the organisational productivity level otherwise these organisations will begin to lose their productivity on daily basis as well as serving as a profit leaking source and may eventually lead to untimely wind-up of the organisation in the long run. However, the outcome of the research is not limited to the cable industry but can serve as basis for proactive action for other business organisations that has profit as their primary objective.

RECOMMENDATIONS

Sequel to the conclusion in the study, the following recommendations are suggested as a way to minimise the degree of employees' movement in order to reduce labour turnover as well as obtaining stability in the productivity of the organisation;

1. That the management of the organisation should device a means to monitor employees' performance over identifiable measurement of criteria in order to discover any kind of dwindling in performance which might be due to some personal factors before it is escalated and becomes a problem thus nipping it in the bud.

2. That the management of the organisation should endeavour to design work and structure that ensures effective accomplishment of set objectives and also that would not see man as machine but as having feelings, attitude and needs to meet. The design of work with appropriate structure will assist employees in the discharge of their duties.
3. That the management of the organisation should provide a suggestion box placed in a conspicuous place with assurance that the information provided shall surely be used for the purpose of improving organisational efficiency and that information provided should be under anonymity.
4. That the management of the organisation should from time to time conduct environmental scanning in the environment within the reach of the business organisation in order to understand activities as well as developments in the environment with a view of responding to these activities and the developments.
5. That the management of the organisation should also ensure that recruitment process is fair and free from unwarranted influences so that appropriate placement could be carried out that would not make the existing employees to nurse any feelings of disaffection towards the end result of the process.
6. That the management of the organisation should endeavour to make the human resources management practices to be robust in order to accommodate contingency issues and situations in order to withstand test of time by being relevant from time to time.

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Patterns And Causes Of Marital Conflict Among Staff Of Selected Universities In Southwest Nigeria

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ABSTRACT

This study investigated the patterns and causes of marital conflict among staff of universities in southwest Nigeria. The study adopted descriptive survey design. The study sample was 1330 married staff members proportionately selected from nine universities using multi-stage sampling technique. Prevalence of Patterns of Marital Interaction Questionnaire (PPMIQ) and Causes of Marital Conflict Questionnaire (CMCQ) were used to collect data for the study. The results showed that 67.1% of the staff indicated that they experienced demand-withdraw pattern, while 26.8% experienced constructive pattern. Only 6.1% experienced destructive pattern. The results also showed that poor handling of family finances was considered as the most prominent with the highest RSI value of 0.806 followed by communication gap and time devoted to children with very high values of RSI of 0.804 and 0.7933 respectively. The least popular cause of marital conflict was difference in income level with the least RSI value of 0.681.

Key Words: Patterns, Marital Conflict, Staff, Universities

INTRODUCTION

Marriage, as a basic institution in every society, may be described as one of the important and fundamental human relationships. It is a culturally, religiously and socially recognised union, normally between a man and a woman, who are referred to as husband and wife. This union establishes rights and obligations between a spouse, their children and even between them and their in-laws. As a very important human institution, marriage not only provides the initial structure to establish family relations, but also serves as avenue to raise and train future generations (Bano, Ahmad, Khan, Iqbal & Aleem, 2013). However, research has shown that in recent times, people are turning away from marriages because it is becoming increasingly difficult to maintain happy and stable union (Amato, Johnson, Booth and Rogers, 2003). This is so because as Omeje (2014) opined, quite a number of marriages today are into serious conflict and this has posed a severe threat to the supposedly marital satisfaction and happiness that would have been enjoyed by couples. This scenario is created because when a man and a woman come together in marriage, each partner comes into the union with his or her individualised personal characteristics, needs, attitudes, values and peculiarities that may be at variance. In other words, if and when two people live together as intimately as husband and wife, they may experience conflict. A disagreement in marital relationship becomes a conflict when it goes beyond the normal intellectual difference that characterises marital relationships

to the emotional realm invoking feelings of anxiety or anger and followed by abusive languages and hostile actions (Makinde and Adeyinka, 2014).

Marital conflict may, therefore, be described as a struggle, clash, strife, disagreement or quarrel between husband and wife, and sometimes with other members of the household, over opposing needs, ideas, beliefs, values or goals. Cummings (as cited in Tam & Lim, 2008) defined marital conflict as any major or minor interpersonal interaction that involved a difference of opinion, between a couple, whether it was mostly negative or even mostly positive. Bjornberg (2004) posited that domestic conflict is an expression of structural conflict and power inequality in society. It is built into family life and has various kinds of expressions. Contradictory needs and interest are elementary aspects of couples' everyday lives although they do not necessarily become spelled out in an open conflict. Osarenren, Nwadinigwe and Anyama (2013) opined that marital conflict come in different forms like spouse battery, spouse abuse, sexual abuse, marital irresponsibility, incest, rape, subtle struggle for control between the couple and other abusive behaviours.

Templeton (2001) categorised marital conflict into two major types. The first is a conflict that may be intense and destructive, the couple desires to honour the commitment they made and want to work through their problems. Their level of care for each other or belief and desire to be in the relationship may exist at various levels. But they are willing to work through personal hurts and failed expectations in order to heal the marriage. The nature of the conflict may comprise difficulty in perceptions, communication skills, and external stressors but fundamentally the two want to preserve their marriage. The second category would comprise relationship problems due to one or both partners wanting to get out of the relationship. The core conflict here is between one or both partners and the commitment to be married. Though there may be understandable and justifiable reasons for the union to come under question, for the committed couple, these circumstances do not cause them to want to end the relationship. So, in essence, you have one dyad of people who, regardless of the conflict, are willing to improve the relationship. On the other hand, regardless of the problems or the skills of the couple one or both no longer want to be in the marriage or believe they can remain in the marriage. The question becomes, "Can the relationship work?" regardless of the conflict. Hence, the central question of dealing with marital conflicts is not a matter of all the various kinds of conflicts that can exist, rather it is whether or not the couple want to make the marriage work and suspend their beliefs about it not working. Commitment in the marriage is the ultimate question in marital conflict (Shadoan and Shadoan, 1999).

Many researchers, both local and foreign, have conducted studies on the causes of marital conflict across communities, societies and cultures. Their findings came up with various factors that cannot be extensively reviewed in this paper due to space limitation. A few will however suffice. A study conducted by Storaasli and Markman (1990) identified ten common problem areas. These areas were money, communication, relatives, sex, religion, recreation, friends, alcohol/drugs, children, and jealousy. A majority of the husbands that participated in the study indicated that most of the conflict they experienced was due to communication and sex. The wives, on the other hand, pinpointed communication, sex, relatives and jealousy as the major sources of conflict in their relationships. The study showed that the intensity of conflict was highest for men in regards to communication and sex, while the intensity of conflict was highest for women in regards to communication, sex, relatives, and jealousy.

Another study conducted by Storaasli and Markman (1990) found that money was the most consistent and intense problem for married couples and over 90% of couples rated this as being their first or second problem area. Also, a study conducted by Kurdek (1994) found that

conflict involving power in a marital relationship had a larger effect on marital dissolution than conflict involving intimacy. Fincham and Beach (1999) found that recently married couples, as well as partners who had been married for several years, stated that their sources of conflict vary from personal characteristics to verbal and physical abuse. The researchers found that an unequal division of household labour was correlated with marital conflict. Another factor that may cause marital conflict is the level of exposure of couple. Expatriating on this factor, Iheagwam (2001) opined that academic and social exposure of couples can make or mar a marriage. He submitted that when couples are not well exposed or enlightened enough academically and socially, they are prone to disharmony, misunderstanding or misrepresentation of issues concerning their married life. Most marriages among literate couples have been undergoing trying times as stated by Carew (1995) and Obe (1997) who in separate studies found that educated couples, despite their qualifications and ethnic affiliation have discrepancies in their views concerning marital disharmony, especially, as it concerned their values and marriage expectations. The person who took decisions or dominated the decision making process in marriage was capable of creating disharmony in the union. This was prevalent among literate couples, who both contributed substantially to the family income and would want to take part equally in decision making in the family. When the man took up this role, as it was common in most societies, the wife rebelled, thus creating situations of disharmony and in some cases, a break or separation (Ibe, Obidoa & Uzoechina, 2013).

Kelley and Thibaut (as cited in Templeton, 2001) listed different interests, goals, desires or expectations that are not compatible, and perceptions that the spouse disputes or does not value one's goal-directed behaviour as causes of marital conflict. But conflict, in their opinion, does not have to arise if the couple skillfully moves from a clash in styles or priorities to opportunities for cooperative interaction. Studies conducted by Aina (2004), Aderinto (2004) and Tenuche (2004) identified refusal to submit to the husband's authority, interference by in-laws, sexual misconduct by wives, conflicts between career and domestic duties by wives, religious differences, extra-marital affairs by husbands, and inability of husbands to live up to domestic responsibilities, as some of the major causes of marital conflict. Moreover, a study carried out by Onwuasoanya (2006) revealed that age at marriage, educational level, religious affiliation, marriage types, income, communication, cultural background, sexual incompatibility, lack of trust, fertility status and in-laws interference are some of the causes of marital conflict.

Mcvey (as cited in Anim, 2012) highlighted financial problems, immaturity before marriage, in-laws, accommodation problems and sexual incompatibilities as resulting in marital distress. Also, Adei (as cited in Anim, 2012) blamed marital conflict on factors such as differences in personalities or temperaments, differences in the sexes, differences in upbringing, communication difficulties, western education and emancipation of women, intrusion of third parties and failure to adjust. Anim (2012) identified self-esteem and assertiveness as causes of marital conflict. He stated that if self-esteem is not properly developed in people, they may enter marital relationships only to find out that they are not really mature enough to handle physical, social, emotional, mental and spiritual conflicts that erupt in marital relationships. Osarenren, Nwadinigwe and Anyama (2013) submitted that marital conflicts are often caused by childlessness, forced marriage, incompatibility, communication gap, interference by in-laws, finances, infidelity, sex of children and lack of appreciation.

Amadi and Amadi (2014) identified nine cause of marital conflict. These are social incompatibility of marriage partners, sexual incompatibility, extreme sexual orientation, extended family affairs/issues and lack of mutual respect between partners. Others are dishonesty and moral decadence, negligence behaviour of spouses, unwholesome social

behaviour and poor marital communication. Stressing the importance of communication to the sustainability of a healthy union, Edger (1996) observed that it has occupied a central position in all discourse concerning successful marriage. Effective marital communication entails that couples discuss issues, respond to questions, call for explanations and accept same timely (when given), as any delay may send out a wrong signal which a partner is bound to interpret same way. Effective marital communication can in fact assuage many other marital disquiets before they could degenerate into crisis situations. Put differently, poor marital communication has been blamed for some other marital problems that have even culminated into divorce or separation of spouses. Purposeful open dialogue between couples often tends to be overtaken by incessant arguments about anything, everything, and nothing; misinterpretation generates misunderstandings; verbal attacks are countered by keeping silence especially on the husband's side (Amadi & Amadi, 2014).

Patterns of marital conflict have been studied extensively in interpersonal conflicts of couples. In literature, the patterns of behaviour exhibited by couples have been discussed from the perspectives of communication mode and physical reactions to conflict situations. Fletcher (as cited in Sadeghi, Hezardastan, Ahmadi, Bahrami, Etemadi and Fatehizadeh, 2011) opined that communication plays an important role in determining satisfaction in marriage and close relationship. To accentuate this position, Christensen and Shenk (as cited in Sadeghi et al., 2011) posited that how one communicates with one's partner is important in setting the overall tone of the relationship and give rise to predict patterns of behaviour, especially when attempting to solve the everyday problems and challenges that confront most couples.

Gottman and Katz (1993) identified a negative marital interaction pattern which they labelled as "Mutually Hostile pattern of conflict resolution", because couples were found to usually engage in negative communication style. When spouses are contemptuous toward each other, they communicate a sense of superiority and moralistic disapproval through insults, mockery, or attributions of the partner's incompetence. Contemptuous statements are often accompanied by belligerent demands in which the spouse contests his or her partner's statements by trying to provoke a response or get a rise out of the partner (Gottman and Katz, 1993).

Researchers such as Pasch and Bradbury (1998) Crohan (1996), Kurdek (1995), Oggins, Veroff and Leber (1993), have all categorised conflict patterns or behaviours as destructive, constructive and withdrawal. Other researchers have defined conflict behaviours as negative or positive affect expression (Gottman, Coan, Carrere & Swanson, 1998), hostile or warm (Matthews, Wickrama, & Conger, 1996), and negative, positive, or disengaged (Smith, Vivian, & O'Leary, 1990) as cited in Birditt, Brown, Orbuch, and McIlvane (2010). In literature, the most described or discussed patterns of marital interaction are the destructive, constructive and demand/withdrawal patterns.

Destructive Pattern

Destructive behaviours include overtly negative reactions to marital problems such as yelling, insults, criticism, belligerence, and contempt (Birditt et al., 2010). As noted by Roloff and Reznik (2008) often individuals are unable to resolve an interpersonal conflict in a single episode and go on to have reoccurring argumentative episodes about that issue. Roloff and Johnson (as cited in Roloff & Reznik, 2008) defined such serial arguing as argumentative episodes focused on a given issue that occur at least twice This pattern, research has shown often leads to negative evaluation of marriage, which in turns leads to a decline in marital satisfaction and stability. Gottman, Markman and Notarius (1977) observed that distressed couples more than non-distressed often engaged in what they described as cross-complaining.

In this pattern of interaction, one spouse's complaint is met with a counter complaint by the partner. In giving a further insight into this pattern of marital interaction, Roloff and Reznik (2008) stated that one spouse might complain that his or her partner never helps around the house and the other counters by noting that the spouse only spends money but does not generate any family income. Research has further found that destructive behaviours (e.g., criticism, defensiveness and contempt) used in observed interactions predicted divorce among newlyweds up to 7 years later and among longer married couples (married an average of 5 years) up to 14 years later (Gottman & Levenson, 1992, 2000, 2002) as cited in Birditt, Brown, Orbuch and McIlvane (2010).

Constructive Pattern

Marital conflict is said to be constructive when partners handle conflicts in positive ways by displaying behaviours, such as verbal and physical affection, problem solving and support (Goeke-Morey, Cummings, Harold, & Shelton, 2003). Birditt et al. (2010) posited that constructive behaviour involved overtly positive reactions such as saying nice things, calmly discussing the problem, and actively listening. In others words, couples who interact in a constructive manner engage in constructive communication that prevents conflict escalation. For example, rather than cross-complaining or problem escalation, non-distressed spouses engage in validation loops in which they acknowledge each other's complaints and are willing to discuss them (Gottman et al., 1977) as cited in Roloff and Reznik (2008). While lending credence to this viewpoint, Sadeghi et al. (2011) opined that in mutually constructive communication, partners discuss the issues affecting them, express their feelings in a positive way and work towards a resolution of the problem. In giving an example of constructive interaction, Roloff and Reznik (2008) explained that when one spouse accuses the other of not helping around the house, the partner responds, "I understand; let's talk about how we can share the load." When doing so, they validate each other while avoiding conflict escalation (Roloff & Reznik, 2008).

Constructive pattern of communication and behaviour have certain benefits for couples who make use of it in their marital relationships. Constructive communication may reduce stress. Although, constructive relational partners are expressing their concerns and feelings, they are also focused on resolving the problem rather than winning the fight or hurting each other. By validating each other's viewpoint and offering to work together to address emotional complaints, they may emotionally soothe each other (Gottman, Coan, Carrere, & Swanson, 1998) as cited in Roloff and Reznik, 2008). In addition, Davidson, MacGregor, Stuhr, Dixon and MacLean (2000) found that normalised blood pressure of sampled couples correlated with constructive disagreements, including problem solving and generating constructive solutions.

Demand-Withdraw Pattern

The demand-withdraw interaction pattern is a pattern of conflict in which one-spouse pressures or blames while the other avoids or withdraws (Donato, Parise, Pagani, Bertoni, & Iafrate, 2013). Christensen and Heavey (as cited in Kline and Song, 2016) stated that demand-withdraw generally occurs when one partner pressures the other through emotional demands, criticism, and complaints, while the other retreats through withdrawal, defensiveness, and passive inaction. The demand-withdraw interaction pattern is present in diverse types of relationships, including romantic relationships, friendships, parent-child relationships, and married couples (Kline and Song, 2016). The focus of this study however, is the presence of this pattern among married couples.

Research over the years has offered several explanations of this pattern with emphasis on why women are often frequent initiators of the pattern (e.g. Caughlin & Scott 2010; Schrodtt, Witt, &

Shimkowski, 2014). The sex difference perspective explains that the frequency of women in the demand role and men in the withdraw role is from socialized gender roles and differences in intimacy needs. Women seek intimacy and closeness by engaging in higher use of DW, while men seek more autonomy through withdrawal behaviours. The individual difference perspective further explains that differences in closeness/autonomy can result from differences in personality and attachment needs. In support of this perspective, the DW pattern is more frequently observed when partners have discrepant intimacy needs that are associated with discrepant attachment styles (Millwood & Waltz 2008) as cited in Kline and Song (2016). A noticeable gap in literature, at least to the knowledge of this researcher, is that not much empirical studies have been conducted in this area as far as members of staff of universities in Nigeria are concerned. Many studies have been dedicated to academic activities within the university system but not much empirical studies have been conducted on the affective life of the staff members. Since no marital relationship is devoid of disagreements and conflicts, as studies have shown, this study assumed that currently, many staff members of universities in south-west Nigeria may be having one form of marital conflict or the other. Apart from the fact that the patterns and causes of such conflicts are currently not known to this researcher, unresolved marital conflict may negatively affect interpersonal relationships among staff members and with the students. It may also affect the work output of the staff which may manifest in lateness to work and outright absenteeism from duty; hence this study.

OBJECTIVES OF THE STUDY

The objectives of the study are to:

- i. determine the patterns of marital conflict among staff of selected universities in southwest Nigeria;
- ii. identify the causes of marital conflict among the staff in the study area.

RESEARCH QUESTIONS

- i. what are the patterns of marital conflict among staff of selected universities in southwest Nigeria?
- ii. what are the causes of marital conflict among staff of selected universities in southwest Nigeria?

METHOD

The study employed the descriptive survey design because the study was basically exploratory and was meant to establish the patterns and causes of marital conflict being experienced by married staff of universities in southwest Nigeria.

The study sample comprised 1330 staff members proportionally selected from nine universities. Multi-stage sampling technique was used to select the sample for the study. Three out of the six states in southwest Nigeria were selected using simple random sampling technique. In each of the three states, three universities were selected using stratified sampling technique with ownership as basis for stratification. This gave nine universities altogether for the study. Respondents were proportionally selected based on the staff population of each university. Five faculties were selected in each of the universities using simple random sampling technique. Respondents from each faculty were selected using convenience sampling technique

Two instruments titled "Patterns of Marital Interaction Questionnaire (PMIQ)" and "Causes of Marital Conflict Questionnaire (CMCQ)" were used to collect data. The PMIQ was adapted from three standardised instruments titled: "Conflict Tactics Scale (CTS; Straus, 1979)", "Gottman Sound Relationship House Questionnaires-Constructive versus Destructive Conflict Measure"

(Gottman, 1999) and “Gottman Sound Relationship House Questionnaires-The Three Relationship Processes” (Gottman, 1999). The original versions of the instruments contained 19, 103 and 55 items respectively, covering harsh startup, the four horsemen, gridlock on perpetual issues, accepting influence, compromise, flooding, negative sentiments override and effective repair attempts. The adapted version, which also contained information, gathered from relevant literature, has two sub-sections: B (i) and B (ii). Sub-section B (i) described three major patterns of marital conflict namely: destructive, constructive and demand/withdraw. Sub-section B (ii) contained 20 items meant to elicit information on couples’ patterns/frequency of marital conflict. The questionnaire was scored using a four-point Likert rating scale with 3 being “Always”, 2 “Sometimes”, 1 “Rarely” and 0 being “Never”.

The CMCQ was adapted was from a standardised instrument titled “Life Distress Inventory” (LDI; Thomas, Yoshioka, & Ager, 1993) and materials from relevant literature. It contained 20 items formed to elicit information from respondents on the causes of conflict in their relationships. Scores were determined using a five-point Likert rating scale with 4 being Strongly Agree, 3 Agree, 2 Disagree, 1 Strongly Disagree.

Data were collected by the researcher and field assistants who have been trained on how to administer the questionnaires. A total of 1330 married staff members were given the questionnaire to answer but 1100 staff returned the administered questionnaire, while 15 copies returned were improperly filled or blank, hence they became void. Data collection was adjudged highly successful because of the percentage (83%) of the respondents that returned the questionnaire.

Data collected were analysed descriptively using percentages, Relative Significance Index (RSI) and k-means cluster analysis to answer the only research question.

RESULTS

Research Question 1: What are the patterns of marital conflict among staff of selected universities in southwest Nigeria?

To answer this research question, three approaches were adopted. In the first approach the responses of the selected staff to the section B of the questionnaire was analysed descriptively using percentages and Relative Significance Index (RSI) and the result is presented in Table 1

Table 1: Patterns of marital interaction during conflicts

	Items on pattern of marital conflict. How frequently does my spouse.....?	Always		Sometimes		Rarely		Never		No response		RSI	Rank
		F	%	F	%	F	%	F	%	f	%		
1	Yells at me	79	7.3	255	23.5	318	29.3	388	35.8	45	4.1	0.506	11
2	Gives up quickly to end an argument	333	30.7	379	34.9	270	24.9	80	7.4	23	2.1	0.727	6
3	Hurts me with some objects	42	3.9	136	12.5	131	12.1	752	69.3	24	2.2	0.375	17
4	Withdraws from arguments	333	30.7	424	39.1	187	17.2	109	10.0	32	2.9	0.733	5
5	Pushes me down	50	4.6	105	9.7	136	12.5	762	70.2	32	2.9	0.368	18
6	Is good at resolving our differences	527	48.6	383	36.3	100	9.2	45	4.1	30	2.8	0.830	2
7	Criticises my personality	79	7.3	217	20.0	335	30.9	424	39.1	30	2.8	0.488	12
8	Keeps quiet during disagreements	265	24.4	458	42.2	216	19.9	124	11.4	22	2.0	0.703	8
9	Slaps my face	47	4.3	71	6.5	129	11.9	812	74.8	26	2.4	0.347	19
10	Openly shares my feelings	438	40.4	375	34.6	138	12.7	106	9.8	28	2.6	0.771	4
11	Sexually denies me	52	4.8	201	18.5	263	24.2	534	49.2	35	3.2	0.445	15
12	Does everything to avoid conflict with me	527	48.6	348	32.1	127	11.7	62	5.7	21	1.9	0.815	3
13	Decides how to resolve our differences	33	3.0	411	37.9	418	38.5	152	14.0	33	3.0	0.580	10
14	Insults me	40	3.7	134	12.4	241	22.2	649	59.8	21	1.9	0.398	16
15	Does not communicate with me	67	6.2	204	18.8	312	28.8	468	43.1	34	3.1	0.469	13
16	Believes in give and take in our discussions	328	30.2	292	26.2	206	19.0	134	12.4	24	2.2	0.712	7
17	Ignores my feelings	59	5.4	213	19.6	277	25.5	513	47.3	23	2.1	0.457	14
18	Listens respectfully to my opinions	591	54.5	291	26.8	122	11.2	60	5.5	21	1.9	0.832	1
19	Beats me	21	1.9	78	7.2	99	9.1	865	79.7	22	2.0	0.325	20
20	Leaves scene of our arguments	202	18.6	417	38.4	289	26.6	147	13.5	30	2.8	0.660	9

Table 1 presents the research participants' responses in terms of the interactions they undertake during marital crises. It can be seen from the table that the prevalent kind of interaction identified by the participants is that the spouse "listens respectfully to my opinions" which possess the highest RSI value of 0.832 and was said to occur always by 54.5% of the respondents, sometimes by 26.8% and rarely by 11.2% while only 5.5% of the respondents claimed it never occurred. The next popular view of the respondents was that the spouse "is good at resolving our differences" and "does everything to avoid conflict with me" with other very high values of the RSI (0.830 and 0.815 respectively). The least popular interactions the staff members reported experienced during crises was that the spouse "beats me" with the least RSI value of 0.325.

In the second approach, the participants' responses to each item were scored in such a way that an "always" response was coded 3 while a "sometimes" response was coded 2 and a "rarely" response was coded 1. Also a "Never" response was coded zero. The individuals' scores

on each of the crisis interaction was obtained by adding up the individual scores on each corresponding items as presented in table 2 in line with Gottman (1999).

Table 2: Items representing different patterns during marital conflicts

Pattern	Items	Description
A	1, 3, 5, 7, 9, 14, 19	Destructive pattern
B	6, 10, 12, 13, 16, 18	Constructive Pattern
C	2, 4, 8, 11, 15, 17 & 20	Withdrawal Pattern

Table 2 presents items describing occurrences during different patterns of marital conflict. In order to determine the prevalent pattern of marital conflict the respondents were experiencing, the scores of the participants on all the different patterns were subjected to a k-means cluster analysis, saving the cluster membership and final cluster centres. The results are presented in 3.

Table 3: Final Cluster Centres

	Cluster		
	1	2	3
PatAa	2.11	9.71	2.05
PatBb	5.64	10.06	14.32
PatCc	4.15	11.75	9.84

Table 3 shows the final cluster centres of the three clusters obtained from the cluster analysis. In k-mean cluster analysis, a cluster is identified by its nearness to a cluster centre while other clusters are located with their closeness to other cluster centres. It can be seen that Pattern A is the closest to cluster 1 other patterns in cluster 2 Pattern A is still closer but it has been identified as cluster one. However, pattern B is closer than Pattern C and therefore identified as cluster 2 while Pattern C is closer to cluster 3 and is so identified. The cluster membership which represents the prevalent marital conflict pattern reportedly experienced by each of the participants was saved and was analysed descriptively to obtain the prevalent marital conflict pattern among the research participants under study. The result is presented in Table 4

Table 4: Prevalent Marital conflict patterns experienced by staff of Universities in Southwest Nigeria

Marital Conflict pattern	Frequency	Percent
Pattern A: Destructive	66	6.1
Pattern B: Constructive	291	26.8
Pattern C: Withdrawal	728	67.1
Total	1085	100.0

Table 4 shows the patterns of marital conflicts experienced by staff of selected universities in southwest Nigeria. It can be seen from the table that most of the respondents (67.1%) indicated that they experienced withdrawal marital conflict pattern while only 26.8% experienced constructive pattern. In fact, 6.1% indicated that they experience destructive marital conflict.

Research Question 2: What are the causes of marital conflict among staff of selected universities in southwest Nigeria?

To answer this research question, two approaches were adopted. In the first approach, the causes reported by the respondents to be responsible for marital crisis were analysed descriptively and the result is presented in Table 5

Table 5:

SN		SA		A		D		SD		NR		RSI	Rank
		F	%	F	%	F	%	f	%	f	%		
1	Poor handling of family finances	531	48.9	304	28.0	114	10.5	92	8.5	44	4.1	0.806	1
2	Communication gap	452	41.7	427	39.4	96	8.8	65	6.0	45	4.1	0.804	2
3	Time devoted to children	403	37.1	453	41.8	136	12.5	44	4.1	48	4.4	0.793	3
4	Money devoted to children	326	30.0	467	43.0	184	17.0	54	5.0	54	5.0	0.758	10
5	Religious differences	307	28.3	416	38.3	216	19.9	94	8.7	52	4.8	0.727	16
6	Sharing of household tasks	245	22.6	473	43.6	239	22.0	80	7.4	48	4.4	0.713	18
7	In-laws' interference	415	38.2	405	37.3	146	13.5	62	5.7	57	5.3	0.785	7
8	Feeling unloved or uncared for	407	37.5	444	40.9	101	9.3	76	7.0	57	5.3	0.787	6
9	Sexual incompatibility	391	36.0	434	40.0	131	12.1	77	7.1	52	4.8	0.776	8
10	Differences in personalities	290	26.7	481	44.3	181	16.7	71	6.5	62	5.7	0.742	11
11	Infidelity (extra-marital affairs)	466	42.9	354	32.6	110	10.1	97	8.9	58	5.3	0.789	4
12	Lack of appreciation	333	30.7	493	45.4	131	12.1	76	7.0	52	4.8	0.762	9
13	Childlessness	327	30.1	418	38.5	154	15.1	126	11.6	50	4.6	0.731	13
14	Alcoholism	351	32.4	406	37.4	141	13.0	132	12.2	55	5.1	0.737	12
15	Opposing needs and interests	256	23.6	521	48.0	168	15.5	85	7.8	55	5.1	0.730	14
16	Difference in income level	234	21.6	387	35.7	291	26.8	112	10.3	61	5.6	0.681	20
17	Conflict between career and domestic duties	244	22.5	481	44.3	222	20.5	84	7.7	54	5.0	0.715	17
18	Parenting style	264	24.3	495	45.6	202	18.6	73	6.7	51	4.7	0.730	15
19	Work related stress	216	19.9	511	47.1	234	21.6	76	7.0	48	4.4	0.709	19
20	Lack of quality time together	433	39.9	405	37.3	118	10.9	79	7.3	50	4.6	0.788	5

Table 5 presents the factors the research participants perceived to be the causes of marital conflicts. Among the perceived causes, "poor handling of family finances" appears to be the most popular with the Highest RSI value of 0.806 and was strongly agreed to by 48.9% of the respondents and another 28.9% merely agreed. Only 10.5% disagreed that this factor causes marital conflict while 8.5% strongly disagreed. Other important causes as identified by the respondents were "Communication gap" and "Time devoted to children" with other very high values of RSI (0.804 and 0.793 respectively). The least popular cause of marital conflict indicated by the respondents was "Difference in income level" with the least RSI value of 0.681.

DISCUSSION

One of the major findings of this study is that members of staff of universities in southwest Nigeria who are married, regardless of their academic attainment, levels of exposure, enlightenment and socio-economic status are not insulated from marital conflict. A possible explanation for this finding could be that when a man and a woman come together in marriage, each partner comes into the union with his or her individualised personal characteristics, needs, attitude, values and peculiarities that may be at variance. Hence, this finding confirms the findings reported by Siffert and Schwarz (2010); Pash and Bradbury (1998); Croban (1996); Kuder (1995) and Veroff & Leber (1993) that disagreement is a natural part of every marital relationship.

Another major find of this study is that the demand-withdraw pattern was the most prominent, followed by the constructive pattern while the destructive pattern was the least popular. Couples employ the demand-withdraw pattern of behaviour when one partner is seeking change, discussion and resolution of an issue, while the other partner seeks to end or avoid the discussion of the issue altogether. A possible explanation for this pattern of behaviour as shown by this study is that one of the couple is probably less emotionally mature while the other partner is more mature emotionally. The partner with low level of emotional maturity most likely floods the other partner, all of the time, with complaints, demands and criticisms. The partner with moderate or high level of emotional maturity would as much as possible want to avoid conflict hence; he assumes the role of a stonewaller.

Furthermore, the length of marriage seems not to have had an impact on the patterns of interaction. Even though only a few of the respondents indicated that they engaged in destructive pattern, yet when the length of marriage is taken into cognisance, this researcher wonders while a preponderant number still engaged in demand-withdraw. Majority of the staff have been married for as long as between 5 and 30 years. It is assumed that couples in marriage relationship will become mature in their patterns of interaction with the passage of time. However, the length of marriage appeared not to have reflected this. When compared with the number of respondents experiencing constructive pattern, it may be concluded that majority of the staff are maritally distressed. This finding may be a further confirmation of finding reported by Fincham (2003) that behaviour sequence in which the husband withdraws and the wife responds with hostility (and vice versa) are more common in distressed than satisfied couples.

Therefore, this researcher is of the opinion that flooding and stonewalling could be injurious to the health of a marriage because they create unhealthy communication pattern. This in turn could lead to couples becoming emotionally detached. The detachment, if not properly handled, could lead to divorce. In addition, children raised in an atmosphere of constant emotional detachment may be at the risk of developing adjustment problems such as aggression, delinquency and conduct disorders. To avoid this, couples who engage in the demand-withdraw pattern of marital interaction will require the services of a professional counsellor as being recommended for the participants of this study.

Poor handling of family finances was found to be the major cause of marital conflict between the staff and their partners. Management of money as a topic was considered by the respondents as particularly stressful to marital functioning in comparison to other sources of marital conflict. This finding is suggestive of how sensitive and short-tempered couples could be when money matter comes up for discussion. A look at the approximate monthly income of the participants showed that majority of them earn above one hundred thousand naira (#100,000). Even though the monthly earnings of their partners are unknown but the possible inference to be drawn is that, even if families are well-off or have ample funds to meet most everyday needs, it does not exclude money as a serious source of conflict. The evident conflict over money could be explained from three perspectives. First, an explanation may be offered from the perspective of Conger's family stress theory, which posits that economic pressure due to insufficient financial resources creates stresses linked to heightened marital conflict (Conger, Ge, Elder, Lorenz, & Simons, 1994). Second, is the prevailing harsh economic situation in Nigeria which is negatively impacting on the economic wellbeing of the average citizen. The attendant effects found expression in high cost of goods and services. Prices of foodstuffs, transport fares, school fees, medical bills, to mention but a few have skyrocketed, almost beyond the reach of the average man on the street. Money no doubt is always to some extent limited while the desires of family members with regard to the expenditure of money can

easily exceed the available funds. This could be a possible explanation while money was rated as the most contentious among causes of conflict. Third, the exercise of power or control over the disbursement of available funds could generate conflict. It is a known fact that before marriage, couples are financially independent. However, they become financially interdependent after marriage. Also, partners possibly may not know each other's attitude towards money before marriage. It is therefore possible for a miser to marry a profligate. This attitude may manifest after marriage, a situation which may come too late in the day. At this stage, setting priorities of financial matters may be dependent on each partner's values and disposition or temperament. Issues like how to budget, what to spend money on, who makes the decisions about what is spent, how to save money and whether the couple is making enough money are therefore capable of generating disagreement between couples. This leads to communication gap which was also indicated as one of the findings of this study. It thus implies that the couples, most of the time, found it difficult to sit together and harmonise their expenditure profile vis-à-vis available funds. The dominant pattern of marital conflict which showed that majority of the participants engaged in flooding and stonewalling in addition to the priority setting of the couple could explain this scenario. The finding of this study is therefore in agreement with the findings of Marshall and Skogrand (2004); Benjamin and Irving (2001), Storaasli and Markman (1990). They confirmed that money is a crucial issue to couple interactions, from the initial years of partnerships through the process of divorce (Benjamin & Irving, 2001).

In addition, communication gap was identified as another prominent cause of marital conflict. The importance of communication to the sustainability of any relationship as intimate as that of a man and his wife cannot be over-emphasised. Effective communication is the primary vehicle of intimacy. Thus, inability by couple to communicate effectively with each other could be harmful to the union. The communication gap reported by the participants could be attributed to the fact that majority of them do not enjoy quality time together as revealed by another finding of this study. The participants' typical pattern of interaction does not encourage much of intimate and emotional attachment. One possible outcome of demand-withdraw pattern is that it allows communication gap to develop between partners. Stonewallers, for instance, generally display silence, inhibit verbal and non-verbal feedback and try to display a complete lack of expressiveness. Currently, however, we live in the information age where we are connected through different kinds of communication platforms such as chat, tweet, text and post. Although the withdrawal behaviour routinely entails disengaging from the conflict or person and may include leaving the situation or keeping quiet, yet this researcher wonders why the participants could probably not avail themselves of the modern platforms of communication to bridge the reported gap. This finding is therefore in agreement with that of Afifi and Guerrero (2000) which showed that communication is the primary vehicle of intimacy, but it remains the number one absent portion of relationship quota missed by both sexes nowadays. The present finding also corroborated that of Sevier, Simpson and Christensen (2004) which showed that the demand-withdraw pattern ranks among the most destructive and least effective interaction patterns in couples' problem-solving repertoires. Also, the findings of Sadeghi et al. (2011) revealed that problematic couples, demand man/withdraw woman and demand woman/withdraw man came to solutions in which one of them was a victor and the other a loser. This they asserted was not a constructive communication pattern.

Another finding of this study revealed that time devoted to children was a major cause of friction between the participants and their partners. From the demographic information supplied it was evident that close to three-quarters of the staff have between three and four children. More than a half of this number has between three and four children. Similarly, close

to three-quarters have been married between one and twenty-one years. This possibly implies that majority of the participants' children are in the adolescence age bracket. The parenting challenges of this period are likely to be daunting for either of the parents, depending on their level of commitment and emotional attachment to the children, a situation which may explain why more time is devoted to the children by either of the couple. Another explanation for this finding may possibly be offered from the perspective of Bowen (1996) Family System Theory which describes how children respond anxiously to the tension in their parents' relationship. A child may develop symptoms which will necessitate attention and protectiveness being shifted to him or her. The child consequently becomes more demanding or more impaired. This in turn distracts one parent from the pursuit of closeness in the marriage. Anyone, no doubt, needs attention from his or her partner. However, when one of the partners do not have a common time to be together, the relationship may be strained, as shown by the finding of this study.

Two other factors with high Relative Significant Index as revealed by the findings of this study are infidelity and lack of quality time together. When viewed as the two sides of a coin, they could have reciprocity effect on each other. For instance, lack of quality time together may possibly encourage infidelity and vice versa. Infidelity is cheating on one's spouse, while lack of quality time together could arise if one of the partners spends ample time with other people or gets involved in activities other than his or her partner. Infidelity may be promoted if there is poor sexual satisfaction on the part of a marital partner. The finding of this study showed that majority of the participants practised monogamy. It is possible that one partner has excessive sexual appetite, which the other partner loathes. A situation like this may encourage extra-marital affairs especially on the part of the partner with the high appetite for sex. Another possible explanation why infidelity was a cause of marital conflict among the participants is probably because they or their partners are suffering from one form of sexual disorder or the other. Sexual disorders such as erectile dysfunction, frigidity, premature ejaculation, orgasm disorder and sexual pain disorder, among others, may possibly lead to sexual dissatisfaction between couple, thus leading to extra-marital affairs. These are challenges that may lead to disaffection and lack of trust where not properly managed by the couple. Couple therefore would require the services of a professional sex therapist or counsellor to assuage the negative impact this development may have on the relationship. It is in this wise that a counselling framework has been developed by this researcher with a view to helping couples overcome these challenges.

CONCLUSION

Based on the results of the analysis, it can be concluded that married staff of universities in southwest Nigeria are not insulated from marital conflict. It is also evident that all the three patterns of marital conflicts investigated are being experienced by the staff of universities in southwest Nigeria. The demand-withdraw pattern appeared to be the dominant or typical pattern among the staff. The study has also highlighted the main causes of marital conflict among the staff. Unresolved marital conflict may negatively affect interpersonal relationships among staff members and with the students. It may also affect the work output of the staff which may manifest in lateness to work and outright absenteeism from duty.

RECOMMENDATIONS

From the foregoing discussion, the following recommendations are suggested:

1. More professionals, like marriage counsellors, psychologists and social workers should be recruited to attend to various needs of couples and intending couples.
2. The Directorate of Online Counselling in collaboration with the Directorate of Information Communication and Technology in the universities should organise regular

seminars and workshops for staff members where the necessary skills to communicate and resolve marital conflicts are adequately imparted.

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Teachers' Perspectives On Teaching And Learning Strategies In Undergraduate Engineering Courses

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ABSTRACT

The objective of this article was to identify what are the teaching strategies most used by teachers of undergraduate engineering courses from three campus of a public university in southern Brazil. The concepts used were based on studies conducted by numerous national and international authors in higher education pedagogical area, and specifically in engineering education. The literature proposes several teaching strategies which allow student's active participation, autonomy, the ability to discuss and solve problems, among other characteristics necessary for the future engineer, in order to overcome a teacher-centered approach focused on memorization. The research methodology used was a mixed sequential explanatory design that consisted of two distinct phases: a first phase with a quantitative approach and a second phase with a qualitative approach. The main results show that "lectures" are still the most used teaching strategies. In relation to the other teaching strategies proposed in the literature, the teachers demonstrated different forms of understanding and application, making it difficult to verify the frequency of use.

Keywords: Higher Education, Engineering Education, Teaching Strategies, Engineer Training.

INTRODUCTION

Several authors, both national and international, have devoted themselves to the study of engineering education. In these studies, several questions are analyzed, among which the teaching strategies used by teachers in classroom. In relation to the methodological issues in engineering education in Brazil, two areas of study were investigated: one that deals with teaching methodology in higher education in general (Abreu & Masetto, 1980; Anastasiou, 1998; Anastasiou & Alves, 2006; Castanho, 2000), and the area of engineering education (Bazzo, Pereira & Linsingen, 2000; Belhot, 2005; Villas-Boas, Mattasoglio Neto, et al., 2012). In analyzing both areas in the literature it was found that studies in the area of higher education methodology do not address the specificities of engineering education, and the area of engineering education, for the most part, does not address teaching strategies from a pedagogical perspective as it tends to analyze experiences of applying teaching strategies or specific teaching resources for a particular content or subject matter. The relevance of these studies is indisputable, but they do not make a broader diagnosis of all possible teaching strategies to be used by teachers in undergraduate engineering courses.

Nassif (2013) points out that there are few studies focused on pedagogical issues in engineering teaching, considering the current context of new values, which require a multiplicity of functions of the engineer. In addition, Cunha & Leite (1994 and 1996, apud Broilo, 2011), found that intervention actions aimed at improving the quality of higher education can no longer be triggered without the construction of scientifically produced

knowledge about reality, taking into account that the problems of pedagogical practice are closely related to the epistemological field in which the professions are inserted.

From these reflections, the objective of this article was to identify which teaching strategies are most used by teachers of Civil Engineering, Computing, Electrical, Electronics and Mechanics undergraduate courses of three campus of a public university in southern Brazil.

TEACHING AND LEARNING STRATEGIES

Several studies on higher education in Brazil (Anastasiou, 1998; Anastasiou & Alves, 2006; Barbosa & Moura, 2013; Bazzo, Pereira & Linsingen, 2000; Carvalho, Porto & Belhot, 2001; Moreira, Luz et al., 2015) reflect on the need to broaden the discussions about improving the quality of teaching, and in general, the same authors point out that most of the time, the difficulty is not related to the knowledge that the teachers have about the contents to be taught, but to aspects related to the pedagogical knowledge, that is, the appropriate way to use the most pertinent strategies to deliver the contents.

In this sense, some authors in the area of education (Gil, 2013; Anastasiou, 2001) consider that we still find in Brazilian higher education, strong remnants of the traditional Jesuit methodology guiding the action of teachers, despite so many decades have passed. In this type of approach the learning process is centered on the teacher who transmits the contents to the students, who in turn must passively assimilate the information. Intelligence is associated with memorization, so that the teaching work is directed to the maintenance of the student's attention and to the explanation of the content, partly the teacher's "property", which transmits it in scheduled doses and sessions, in a basically textual and linear way. Students, in turn, receive the teachings without much interest and often, not knowing what to do with them (Silva & Cecílio, 2007).

Lecture has so far remained the dominant form of academic teaching in spite of continued attacks, critiques and intentions to suppress it and replace it with more efficient methods and procedures. Although, lecture is efficient in the transfer of knowledge, is not sufficient for deeper understanding, problem solving, creative work, and similar. In the effort to overcome the traditional teaching methodology, new methodological proposals are being suggested to help develop critical thinking, self-confidence, a sense of responsibility and initiative, the ability to learn, communicate, develop teamwork, make decisions and solve problems and conflicts (Gonçalves, 2008).

One proposal that seeks to overcome traditional pedagogy is the active learning approach. Although this approach has been in use for several decades in many countries, in Brazil it is still not a reality in many higher education institutions. This teaching methodology assumes the active involvement of the student in the process of learning, reading, writing, asking, discussing or problem solving, and project development. In addition, the student should perform mental tasks of high cognitive level, such as analysis, synthesis, and evaluation (Barbosa & Moura, 2013). In short, active learning involves students to do and think about what they are doing (Bonwell & Eison, 1991).

According to Felder and Brent (2004 apud Campos et al., 2012), active learning consists of any activity that results in student engagement about what is being presented. It involves individual or group work to answer questions, solve small problems, start solving more complex problems, brainstorming or think about issues presented.

Bonwell & Eison (1991, p. 2) points out some of the main characteristics associated to active learning: a) integrate thought and practical activities; b) enable varied learning styles; c) promote cognitive interaction with the others, whether adults or peers; d) emphasize exploration of attitudes and values; e) support readiness to carry out tasks and motivation to learn; g) develop higher-level cognitive processes; foster reflection and metacognitive activity; enable observation and monitoring of students and facilitate immediate feedback from teachers (e.g. their prior knowledge and learning styles).

Active learning and engineering education, according to Graaff and Christensen's thinking (2004, apud Villas-Boas, Mattasoglio Neto, 2012, p. 64), form a natural pair because "the engineer is educated to design and build solutions to real-world problems. Originally, the act of educating, in engineering, used to have very close links with its practice, but gradually engineering education became more and more theory-based".

Some authors who study active learning methods applied in engineering education (Chickering & Gamson, 1987; Morais, 2009; Pereira, Schmitt & Dias, 2007) argue that students should do more than just listen. They should read, write, discuss, or engage in problem solving. For Villas-Boas, Mattasoglio Neto, et al. (2012, p. 63),

the reformulation of the preparation of the engineer's professional profile puts [...] demands on new methodologies, differentiated pedagogical positions and a more consistent vision of the teaching-learning relationship. In this situation, the expression "active learning", or "active learning methods", has received growing attention from educators as one of the possible answers to the new educational demands.

The focus of the teaching-learning process, which should move from teaching (having the teacher as the center of the process), to learning (having the student as the center of the process), requires changes, especially by the teachers, because they need to master new pedagogical strategies in order to improve the quality of their teaching.

Considering the above discussions, which revolve around the search for the improvement of engineering education, it is necessary to look to the teaching strategies which compose the daily life of the classroom, giving shape and concretizing the moment of teaching. In order to list the various strategies used in higher education, a synthesis (Table 1) was elaborated, based on publications of researchers from the areas of higher education didactics and engineering education, whose purpose is to present definitions of these strategies. However, it is pertinent to point out that the presented strategies are not the only ones used in undergraduate engineering courses, and there may also be variations of nomenclature, form of application, etc.

Table 1 - Teaching strategies used in higher education and in engineers' training

Teaching Strategies	Definition
Virtual Learning Enviroments	Virtual environment that allows the administration, storage and availability of contents and documents (files); the interaction between students and teachers through forums, chat rooms, collaborative texts, etc.; and the accomplishment of evaluative processes and monitoring student's activities.
Problem-based learning	Active didactic procedure, in which the students are placed before a new problem situation that has not been learned and to which they must present a solution or suggestion of solution, according to the nature of the proposed problem, using techniques already learned.
Group discussion activities	A strategy that seeks to break down a point of view, subjecting it to questioning and analysis. Discussion of a theme/problem by students which can be developed in a number of ways.
Lecture	Teaching time occupied wholly or mainly by a teacher-centered exposition. The teacher presents answers without the students asking him or her questions. Students may have the opportunity to ask or participate in a small discussion, but in general they do no more than listen and take notes.
Dialogic Lecture	Presentation of content by the teacher, with the active participation of students, whose prior knowledge must be considered, and may even be taken as a starting point. The teacher seeks to establish a relationship of exchange of knowledge and experiences with the students and uses the dialogue to cause the students to question, interpret and discuss the object of study.
Demonstrative practice class	A strategy often held in laboratories or in other specific environments, centered on the teacher, for demonstration of contents, theories, procedures, etc.
Executive practice class	Held in the laboratory or other specific environments in which students participate actively, developing activities, operating equipment, under the guidance of the teacher.
Case study	Teacher brings to the students the report of a real case, fictitious or adapted from reality, which is analyzed thoroughly and objectively from concepts already studied.
Games	Use of games as didactic resource.
Workshop, round table, panel, forum, symposium	Set of varied activities that aim to meet people, students and/or specialists, in order to study, debate and work towards the knowledge or deepening of a theme.
Guided reciprocal peer questioning	The teacher makes a brief statement on a subject. It then gives the students a list of essential points on the subject. The students, individually, elaborate questions on the content that, not necessarily, they can answer. They then discuss group issues. In the end, the teacher broadens the discussion of the most relevant issues with the whole class.
Debates	Debates can be an effective and engaging way for students to analyze different concepts and to develop critical thinking and public speaking skills. They are also useful strategies for achieving greater participation in class and for discussing controversial issues in a structured environment.
Dramatization	Representation, theatrical presentation, in which, from a given situation, the students set up a "theater". It can contain explanation of ideas, concepts, arguments etc.
Inquiry-based learning	Inquiry-based learning is a research-based strategy that actively involves students in the exploration of the content, issues, and questions surrounding a curricular area or concept. The activities and assignments can be designed in a way that students work individually or together to solve problems involving both in-class work and fieldwork.
Just-in-time teaching (JiTT)	Students, before classes answer to questions about the content to come, formulated by the teacher. Questions can be made available in a virtual environment. The teacher uses the students' responses to prepare class activities.
Project-based Learning	Project-based learning involves deep learning, as it focuses on real world problems and challenges and relies on problem solving, decision making and investigative skills. Project-based learning begins with the end product or presentation in mind that requires learning specific knowledge and concepts,

	thus creating a context and reason to learn and understand the information and concepts.
Field study	Study of the natural and social context in which the student enters, aiming at a specific problem in an interdisciplinary way. It creates conditions for the contact with reality; it facilitates the acquisition of knowledge directly, through the lived experience.
Text study	Exploring an author's ideas, from the critical study of a text, unveiling its structure, its objective, and perceiving the resources used by the author for the transmission of the message.
Independent Study	To study under the guidance and directivity of the teacher, aiming to remedy specific difficulties. This study can be developed in or outside the classroom and can replace the presentation of the content by the teacher.
Exercise Solving	It is based on the use of skills or techniques learned, that is, transformed into automated routines as a consequence of continuous practice. It is limited to exercising a technique in situations or tasks that can be solved by the usual means. Priorizes the memorization of rules, formulas, equations and algorithms.
Thinking-aloud pair problem solving	In pairs, a student is the solver of a problem launched by the teacher and the other, the questioner. The solver presents the solution step by step. The questioner notes errors detected. The teacher asks questions to the groups to know at what stage is the solution of the problem.
Seminars	Study of a theme from different sources to be studied and systematized by a group of participants, under the guidance of the teacher, aiming at obtaining an overview of the subject matter.
Simulations	Emulation of a real situation, in which the student must "work" searching for solutions or analyzing component variables etc. The simulations can be done through equipment, computers, simulated jury, etc.)
Softwares	They have a didactic character and are specially developed to help the student to build knowledge related to a didactic content, with or without the mediation of a teacher. They can be classified in tutorials, exercise or practice, demonstration, simulation, game and monitoring.
Brainstorming	Students express orally, in words or short sentences, everything that comes to mind on a given topic, without bothering to "censor" these ideas. There is no right or wrong. Anything that is raised will be considered, and a further explanation will be requested if necessary. Concomitant with these activities, someone will write down everything that is said, on the board or on a paper.
Cooperative note-taking pairs	In pairs, students share their notes, so that everyone can improve their notes, synthesis, about the content being treated.
Technical visits	Students participate in excursions, visits to industries, companies, environments etc.
Concept maps	Concept maps are visual representations of the relationships between concepts. Concepts are placed in nodes (often, circles), and the relationships between indicated by labeled arrows connecting the concepts. To have students create a concept map, identify the key concepts to be mapped in small groups or as a whole class.
Portfolios	The portfolio is an open-ended and un-graded task designed to explore teaching from many different vantage points. It is organized as a dynamic assessment task, not simply a static end product.

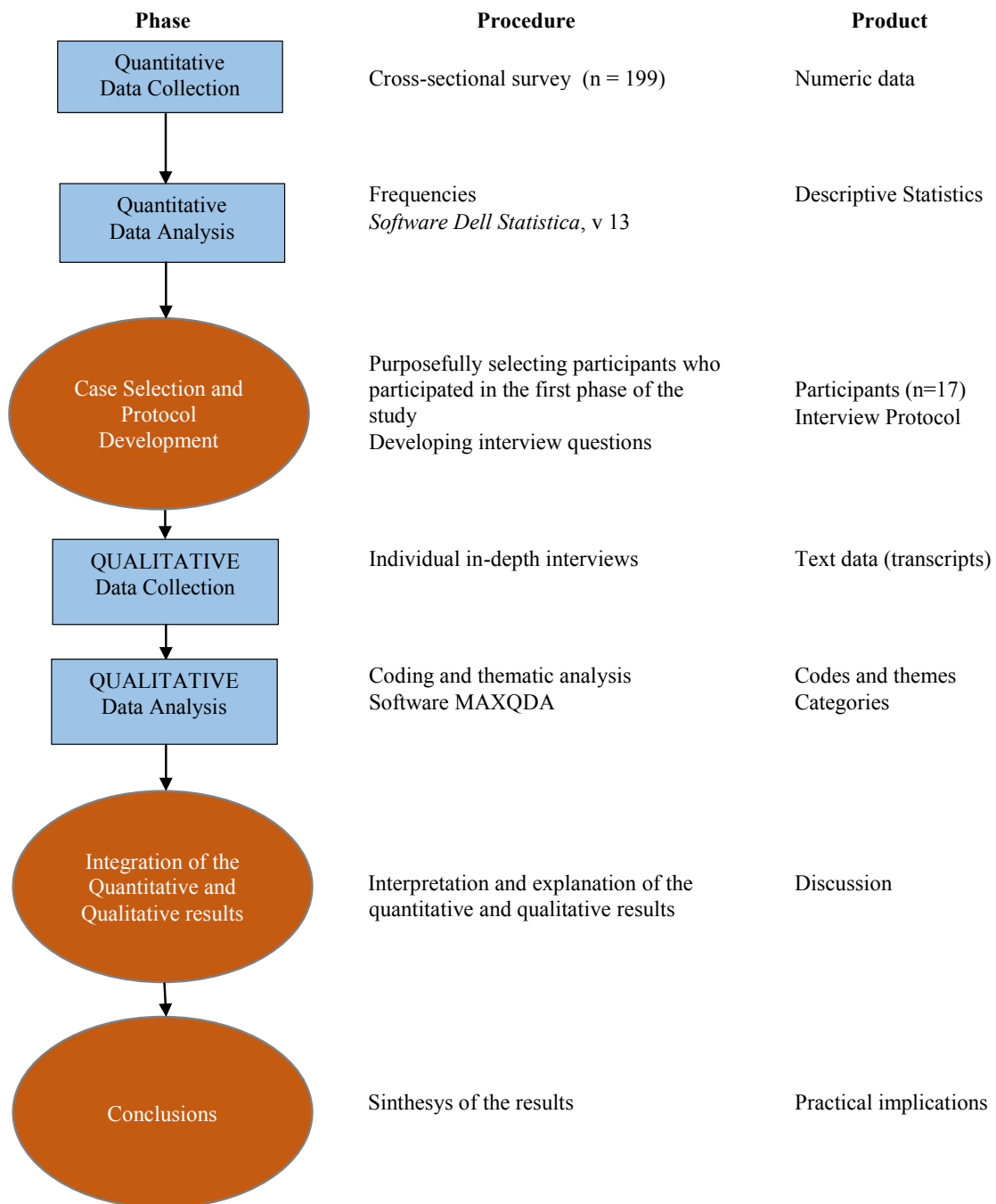
METHODOLOGY

Study Design

The researchers used a mixed methods approach (Tashakkori & Teddlie, 2003), which is a procedure for collecting, analyzing and mixing or integrating both quantitative and qualitative data at some stage of the research process within a single study (Creswell, 2005). The rationale for mixing both types of data is that neither quantitative nor qualitative methods are sufficient by themselves to capture the trends and details of situations. When used in combination, quantitative and qualitative methods complement each other and provide a more complete picture of the research problem (Green, Caracelli, & Graham, 1989; Johnson & Turner, 2003).

This study used a sequential explanatory mixed methods design, consisting of two distinct phases (Creswell, Plano Clark, Guttman, and Hanson, 2003). In this design, the quantitative (numeric) data is collected and analyzed first, while the qualitative (text) data is collected and analyzed second in sequence, and helps explain, or elaborate on the quantitative results obtained in the first phase. The priority (Creswell et al., 2003) in the study was given to the qualitative approach, because it focused on in-depth explanations of the results obtained in the first, quantitative, phase. The results of the quantitative and qualitative phases were integrated (Creswell et al., 2003) during the discussion of the outcomes of the entire study (see Fig. 1) for a diagram of the mixed methods sequential explanatory design procedures in the study).

Figura 1 - Diagram of the mixed sequential explanatory design



Source: Creswell & Plano Clark (2013).

Target Population

The target population in this study was 396 professors of professional and specific subjects of the Civil, Computing, Electrical, Electronics and Mechanics undergraduate engineering courses of three campuses of a public university in southern Brazil. The sample of the quantitative phase was composed by 199 teachers, selected through non-probabilistic sampling by trial. The participants of the qualitative phase were 17 teachers selected purposefully, with reference to the participants of the quantitative phase and using the sampling strategy of maximum variation.

QUANTITATIVE PHASE

Data Collection

In the first phase of the study, quantitative, the data were collected from a cross-sectional survey, using as a research instrument a closed questionnaire. The questionnaire applied, an adaptation of the instrument used by Moreira et al. (2012), is composed of three Likert-type scales, which aim to evaluate different aspects related to teaching strategies, evaluation and acquisition of didactic-pedagogical skills.

In this article, we will report only the results obtained with the evaluation scale of teaching strategies (ESTS), composed of 6 points, with anchors in: 0 (Not applicable) 1 (Never), 2 (Few Times), 3 (Sometimes), 4 (Frequently) and 5 (Always). The 33 variables that make up the scale are teaching strategies based on the publications of several researchers in the area of didactics of higher education and the area of engineering education (Abreu & Masetto, 1980; Anastasiou & Alves, 2006; Barbosa & Moura, 2013; Ghelli, 2004; Gil, 2013; Godoy, 2000; Villas-Boas, Mattasoglio Neto, et al., 2012).

The questionnaire was applied in the first half of 2015 to a non-probabilistic sample by trial, composed of 199 teachers. From the answers indicated in the questionnaires, the results were obtained through descriptive statistics performed in the software Dell Statistica version 13.

Data Analysis

Univariate statistical procedures were used to analyze the survey data. Survey demographic information and the participants' answers to separate items on the evaluation scale of teaching strategies were analyzed using frequency counts.

QUALITATIVE PHASE

The second phase of the study was characterized as qualitative. According to Moreira & Caleffe (2008, p. 73), the qualitative research "explores the characteristics of individuals and scenarios that cannot be easily described numerically. The data is often verbal and is collected by observation, description and recording". The qualitative phase of the study in an explanatory sequential mixed design, intended to assist in the interpretation and explanation of the questions arising from the initial quantitative results (Creswell & Plano Clark, 2013; Sampieri, Collado & Lucio, 2013).

Interview Protocol Development

The interview protocol was elaborated from the observation of the results obtained in the quantitative phase, in order to formulate questions that aimed to know or understand in-depth what had already been answered objectively in the quantitative phase. The interview protocol consisted of five blocks of questions: 1 - Initial questions; 2 - Teaching process; 3 - Teaching strategies; 4 - Evaluation strategies; 5 - Acquisition of didactic-pedagogical skills. In this article we will discuss only the answers that refer to the use of teaching strategies.

Data collection

The technique to collect data was the semi-structured individual interview. Interviews were conducted with 17 teachers who participated in the first phase of the study and who expressed an interest in participating in the second phase. A purposive sample was used to select participants, and the sampling strategy used was the maximum variation, whose objective is "to capture the various variations in the sample and to identify common patterns" (Moreira & Caleffe, 2008, p.175). Each interview was audio taped and transcribed verbatim.

Data analysis

To analyze the qualitative data, the comparative constant method of data analysis were used (Charmaz, 2009; Leite, 2015). The method involves the following steps: a) reading and re-reading the transcripts of interviews and notes; b) creation of codes with the software MAXQDA 12; c) comparisons and groupings of codes in preliminary categories of similar opinions; d) connection of preliminary categories; e) interpretation and discussion of categories.

RESULTS

Quantitative Phase

Demographic Information

The study participants were compared on the following demographic characteristics: campus, age, gender, kind of degree, and academic qualification. The typical participants were: between 30 and 59 years, predominantly man (85%), as for career stage 30% (59) early career, 21% (41) mid-career, and 49% (98) late career, 94% have master and/or doctorate degree (see Table 1).

Table 1 - Demographic characteristics of the quantitative sample

Item	Category	Quantitative Phase (n=199)
Campus	Campus 1	101 (51%)
	Campus 2	71 (36%)
	Campus 3	27 (14%)
Gender	Female	30 (15%)
	Male	169 (85%)
Career Stage	Early Career (5 years or less)	59 (30%)
	Mid Career (6 to 12 years)	42 (21%)
	Late Career (13 years or more)	98 (49%)
Kind of Degree	Engineering	186 (93%)
	Technology	13 (7%)
Academic Qualification	Undergraduated	12 (6%)
	Master Degree	57 (29%)
	Doctorate Degree	130 (65%)

Scale Items Frequencies Analysis

Table 2 shows the frequency of teachers' responses to the most used teaching strategies in the classroom. It is possible to observe that the most used teaching strategies are: "virtual learning environments", "lecture", "dialogic lecture", and "exercise solving" (traditional teaching methods). The least used strategies are: "dramatization", "games", "guided reciprocal peer questioning" and "discussion lists via computerized means".

Tabela 2 – Frequency of use the teaching strategies (n=199)

Item	Not applicable	Never	Few Times	Sometimes	Frequently	Always	Order
Virtual Learning Enviroments	1(0%)	7(4%)	9(5%)	14(7%)	44(22%)	124(62%)	1
Lecture	1(0%)	3(2%)	12(6%)	31(16%)	78(39%)	74(37%)	2
Dialogic Lecture	0(0%)	2(1%)	8(4%)	40(20%)	90(45%)	59(30%)	3
Exercise Solving	6(3%)	8(4%)	14(7%)	24(12%)	65(33%)	82(41%)	4
Executive Practice Class	6(3%)	14(7%)	15(8%)	24(12%)	66(33%)	74(37%)	5
Problem Based Learning	2(1%)	8(4%)	17(9%)	42(21%)	82(41%)	48(24%)	6
Demonstrative Practice Class	9(4%)	23(12%)	21(10%)	43(22%)	55(28%)	48(24%)	7
Softwares	9(4%)	32(16%)	27(14%)	32(16%)	38(19%)	61(31%)	8
Teaching by Projects	4(2%)	20(10%)	29(15%)	48(24%)	60(30%)	38(19%)	9
Out-of-class Guidance by Computerized Means	4(2%)	25(12%)	35(18%)	45(23%)	50(25%)	40(20%)	10
Case Study	5(2%)	24(12%)	40(20%)	52(26%)	47(24%)	31(16%)	11
Inquiry-based Learning	3(1%)	15(7%)	51(26%)	56(28%)	51(26%)	23(12%)	12
Simulation	18(9%)	63(32%)	15(7%)	37(19%)	27(13%)	39(20%)	13
Seminars	5(2%)	51(26%)	42(21%)	47(24%)	34(17%)	20(10%)	14
Independent Study	5(2%)	39(20%)	46(23%)	56(28%)	38(19%)	15(8%)	15
Group Discussions Activities	16(8%)	62(31%)	46(23%)	31(16%)	30(15%)	14(7%)	16
Themes Debates	12(6%)	52(26%)	53(27%)	45(23%)	27(13%)	10(5%)	27
Group Dynamics	12(6%)	73(37%)	47(24%)	31(15%)	24(12%)	12(6%)	18
Conceptual Maps	8(4%)	86(43%)	39(20%)	33(17%)	21(10%)	12(6%)	19
Texts Studies	12(6%)	61(31%)	54(27%)	40(20%)	20(10%)	12(6%)	20
Technical Visits	7(3%)	81(41%)	50(25%)	33(17%)	19(10%)	9(4%)	21
Workshop, Panel Discussion, Forum, Symposium	14(7%)	101(51%)	36(18%)	26(13%)	18(9%)	4(2%)	22
Brainstorming	19(10%)	93(47%)	40(20%)	26(13%)	12(6%)	9(4%)	23
Field Study	16(8%)	90(45%)	49(25%)	25(13%)	13(6%)	6(3%)	24
Minute Paper	2(1%)	88(44%)	56(28%)	34(17%)	14(7%)	5(3%)	25
Thinking-aloud Pair Problem Solving (TAPPS)	10(5%)	126(63%)	20(10%)	28(14%)	6(3%)	9(5%)	26
Just-in-time Teaching	6(3%)	113(57%)	37(19%)	29(14%)	8(4%)	6(3%)	27
Cooperative Note-taking Pairs	11(6%)	137(69%)	19(10%)	18(9%)	9(4%)	5(2%)	28
Portfolio	29(15%)	117(59%)	29(15%)	11(5%)	5(2%)	8(4%)	29
Discussion Lists via Computerized Means	11(6%)	133(67%)	30(15%)	14(7%)	8(4%)	3(1%)	30
Guided Reciprocal Peer Questioning	9(5%)	124(62%)	37(19%)	20(10%)	5(2%)	4(2%)	31
Games	31(16%)	137(69%)	17(9%)	7(3%)	6(3%)	1(0%)	32
Dramatization	43(22%)	136(68%)	11(6%)	8(4%)	1(0%)	0(0%)	33

It is also possible to observe in Table 3 that most teaching strategies, for example, "Portfolio", "Cooperative Note-taking Pairs", "Just-in-time Teaching", "Thinking-aloud Pair Problem Solving" (TAPPS), "Minute Paper", "Field Study", "Brainstorming", "Workshop, Panel Discussion, Forum, Symposium", "Technical Visits", "Texts Studies", "Conceptual Maps", "Group Dynamics", "Themes Debates", "Group Discussions Activities", "Independent Study", "Seminars", "Simulation", "Inquiry-based Learning", "Case Study", "Out-of-class Guidance by Computerized Means", "Teaching by Projects", and "Softwares" are strategies "few times" or "never" used by the teachers.

DISCUSSION

The results show that teaching strategies that can provide greater interaction and active student participation in the teaching process through computerized resources are not widely used. Although 62% of the respondents indicated that they always use "virtual learning environments", in general, teachers' use of this strategy is limited, in most cases, mainly for receiving and sending materials and establishing contact with the students, to the detriment of the use of other resources made available by virtual environments, such as lists of discussions, chats, among others.

"Lecture" (76%) and "dialogic lecture" (75%), are the most used strategies. However it is important to point out that the dialogic lecture has not served to replace or to overcome the lecture, as proposed by authors such as Anastasiou & Alves (2006) and Ghelli (2004). In this sense, the dialogic lecture is a strategy used concomitantly to lecture or the teachers can not differentiate one strategy from the other.

The "exercise solving" strategy is "frequently" or "always" used by 74% of respondents. This strategy, according to authors in the area of higher education didactics (Clement & Terrazan, 2011; Conceição & Gonçalves, 2003; Echeverría & Pozo, 1998) is based on the use of automated routines as a consequence of a continuous practice limited to exercise a technique in situations or tasks that can be solved by the usual means. By prioritizing the memorization of rules, formulas, equations, and algorithms, this strategy is often associated with traditional pedagogy.

Strategies such as "executive practice class", "problem-based learning" and "demonstrative practice class", considered by researchers in the areas of technological education and engineering education (Angelo & Loula et al., 2014; Villas-Boas, Mattasoglio Neto et al.) as important to provide the development of critical thinking, the ability to solve problems in unusual situations, adaptability to change, concept learning, teamwork, etc., are "frequently" used. This result suggests teachers' intention to provide students' active participation in the learning process, and to be able to experience, and visualize the contents worked.

However teaching strategies such as "portfolio", "workshop", "panel discussion, forum, symposium", "technical visits", "texts studies", "conceptual maps", "group dynamics", "themes debates", "group discussions activities", "seminars", "simulation", "inquiry-based learning", "case study", "teaching by projects", which presupposes an active participation of the student by developing activities under the guidance of the teacher, and that have as main objective the development of the ability to study and analyze, to synthesize, and to participate in discussions, debates and the exchange of ideas, so necessary to current professional practices, are strategies are "few times" or "never" used, as can be seen in Table 3. Freire & Schor (1986, p. 57) reported that "teachers see in their own preparation so few good class discussions that they avoid testing their own ability as leaders of discussions". The authors also point out that students, in turn, are conditioned to be passive when the teacher starts a lecture, which ends

up constituting a trap for the modality of classes in which the discussion is intended. At the other extreme, discussions and debates can “heat up” and embarrass many teachers who, in this way, feel more secure by continuing to give lectures to convey the content of their subject matter.

Qualitative Phase

The main results of the qualitative phase of the study related to teaching strategies are presented below. The participants of the qualitative phase were 17 teachers selected purposefully. Table 3 shows the demographic characteristics of the sample. For the identification of the interviewees, the code I (interviewed) was used, followed by a number from 1 to 17, according to the chronological order in which the interviews took place.

Table 3 - Demographic characteristics of the qualitative sample

Item	Category	Qualitative Phase (n=17)
Campus	Campus 1	9 (53%)
	Campus 2	5 (29%)
	Campus 3	3 (18%)
Gender	Female	4 (24%)
	Male	13 (76%)
Career Stage	Early Career (5 years or less)	5 (29%)
	Mid Career (6 to 12 years)	5 (29%)
	Late Career (13 years or more)	7 (42%)
Kind of Degree	Engineering	16 (94%)
	Technology	1 (6%)
Academic Qualification	Undergraduated	3 (18%)
	Master Degree	2 (11%)
	Doctorate Degree	12 (71%)

Initially we asked participants to describe “how they developed their classes with students”. The strategies mentioned by the teachers were: “lecture”, “dialogic lecture” and “exercise solving”. In order to probe for more detailed explanation this question was followed by an additional question: “how do you use these teaching strategies in your classes?”

In relation to the “dialogic lecture”, twelve (12) out of seventeen (17) teachers reported that “chat” prevails in the classroom, with frequent exchange of information between them and students. This is clear in the I₁ report, and it illustrates the opinion of the other teachers:

My classes are usually dialogic. What I do is a chat. This is a way of working the class that I realize extends students' learning possibilities. The students end up losing some of the fear and end up asking. I say: “Look, ask, ask what's pertinent. That doubt of yours may be the doubt of the colleague who is ashamed to ask and sometimes, your question is the hook for the other colleague to ask” (I₁, Civil Engineer).

For this teacher, the dialogic lecture is a good strategy to involve students and to promote greater connection with the activities developed in class, and consequently, to increase participation. In addition, this strategy allows the teacher to identify if the students understand the content and take back points that needed reinforcement or clarification.

Five (5) respondents, however, reported that their classes were predominately “lectures”, because although they try to stimulate student participation, depending on the class and

subject matter being developed, dialogue does not always happen. The I15 account illustrates teachers' opinion,

So, conquering the students so they talk to me is a challenge. It's something that I wish there were more, but this does not happen. It happens, but it's a tricky business to do. There are classes that let the students more loose and you can, but it's difficult (I15, Computer Engineer).

The participants' opinion regarding "dialogic lecture" make it clear that most teachers seek to develop classes in which the exchange of information and dialogue is established. However, when they fail to do so, teachers opt for "lectures", so characteristic of the traditional pedagogy. By using this strategy, they ensure that the content provided in the teaching plan of the subject matter is transmitted.

The teaching strategy "exercise solving" was mentioned by all the seventeen (17) interviewees as classroom activity, but through exercise lists. Teachers' reports have also shown that the way they propose this strategy requires more than the simple application of rules, formulas, equations and processes already known. This issue is exemplified in the I2 report below:

I do the calculation manually, and then I show that it's not just to do the math, it's not just adding $2 + 2 + 2 + 2$. You have to make decisions before you do the calculation. So I'm doing this with the subject matter of refrigeration. For example: "The minimum volume that was requested here was $100m^3$. So you calculate a box of this size. How are you going to put this stuff there? I need a forklift. I need someone to carry. Wait, if I have a forklift, I have to have a moving area of it. Ah, then wait there, it's got bigger. "Wow, but it's almost double the size?" "Yes. Now it has increased the size of the chamber and such" (I2, Mechanical Engineer).

What is understood as "exercise solving" by teachers often demands cognitive abilities such as the ability to analyze, establish relationships, creativity and decision making, which are superior to the automated application of rules and formulas. In this sense, the activities developed do not correspond to what is known and advocated by several authors (Clement & Terrazzan, 2011; Conceição & Gonçalves, 2003; Echeverría & Pozo, 1998).

In addition to describing the teaching strategies discussed above, we also asked teachers to report how they used the following strategies: "problem-based learning", "practical classes", "teaching by project" and "virtual learning environments".

In relation to "problem-based learning", all teachers interviewed (17) considered that they use this strategy, since solving problems is an inherent activity of the engineering professional. However, although the participants considered that they use it, this does not correspond to what is suggested in the higher education didactic literature as "problem-based learning". This strategy presupposes the involvement of the student in the identification, analysis and solution of real problems proposed by the teacher or identified by the students themselves. Only eight (8) out of the seventeen (17) interviewees mentioned that used the strategy in this way. The I6 report, below, exemplifies how these eight teachers use it:

I asked students to bring problems from their companies and then propose solutions using the quality management tools we had in class. So they had to propose the solution to a problem there in the company. Some students brought real problems and the company adopted the solution to the problem they presented. After they gave a presentation, and debated (I6, Electrician).

The results showed different ways of understanding “problem-based learning”. On the one hand, all teachers have stated that they use it, but in fact, many use other teaching strategies that also involve student in problem solving, usually on a smaller scale. Regarding “practical classes”, ten (10) out of seventeen (17) interviewees described them as classes in which students apply concepts and methods studied through participation in challenges, solving calculations, elaboration and execution of projects, seminars, among other activities. The I1 report is an example of the opinion of these teachers about the issue:

Practical class for me is everything that can deepen, and so to say, establish the knowledge in students' head. So, since a class that you develop an exercise, for me is a practical class. He [the student] is practicing. Look, this is a real exercise. This data is real! So let's practice, let's see how it develops. Of course, the lab is still a practical lesson, so that knowledge is more profitable and the field class too. I see this as being a practical class (I1, Engineer Cartographer).

In this perspective, other teaching strategies such as “problem solving”, “problem-based learning”, “teaching by project”, “seminars”, “field study”, “simulations”, “technical visits”, and “discussions and debates” are considered by the interviewees as “practical classes”.

This way of understanding these strategies is identified with the provisions of the Curriculum Guidelines for the Training of the Engineer in Brazil (CNE, 2002). This document establishes objectives for the training of engineers that indicate the practice of calculation, analysis, creation, among others, as activities that constitute general skills and abilities for the exercise of the profession of the engineer, that is, professional practices.

The other seven (7) teachers understand that “practical classes” are activities linked to laboratories and equipment (teaching kits, simulators, materials) or carried out in specific environments (visit to companies, physical spaces, etc.) through demonstration of the teacher or student participation, observing, manipulating materials or operating equipment. The I4 report is an example of this understanding:

They are classes using didactic kits that have the purpose of promoting the practice of the contents worked in a theoretical way, through the use of prototypes, the use of devices, components, which serve, for example, to form a system that explains how they function when properly integrated (I4, Electrical Engineer).

This way of understanding the strategy is in line with what is proposed as a “practical lesson” by several authors (Gil, 2013; Madeira & Silva, 2015; Veiga, 1991; Wilber, 1966) who define it as activities carried out in laboratories or in other specific environments for the demonstration of theories, performance of procedures, use of equipment, etc.

These differences in how the “practical class” is understood at first glance may seem insignificant, but they reveal the lack of consensus around a didactic aspect that can have implications for the engineer's training. The “practical class” is the only teaching strategy that, in most of the subject matters, has an expected workload to be fulfilled and specified in the courses projects, which reveals its importance in the training context of the engineering professional. However, evidence has shown that, despite the importance attached to this strategy, teachers have different ways to understand what constitutes “practice” in the context of engineering training. These raises doubts as to whether the objectives set for this training, related to practical experiences, are being sought.

In relation to the strategy “teaching by projects”, ten (10) out of seventeen (17) participants in the study answered that they use it. However, teachers’ reports also indicated different ways of

understanding and the way they use it. For eight (8) respondents, this strategy consists of teaching the student to develop projects or parts of engineering projects, in other words, they confuse the strategy with “engineering design”. The I₁ report, below, summarizes teachers' understanding about the strategy:

This question of “teaching by projects” is for you to bring, for example, a situation to do, to design an allotment. So this is a way for you to do, teach the basics to the student how to solve the work by project. “Look, I'm going to learn how to do a survey with the purpose of doing an allotment. How do I do it? What do I have to follow? How do I go to the field? How do I do this in the field?” (I₁, Engineer Cartographer).

Again we can see the closeness between the concepts coming from the area of teacher training and the way they understand and use these teaching strategies. Another way of understanding and using the “teaching by projects” strategy, reported only by two (2) teachers, refers to activities in which students are involved in experiences in real situations, such as: analysis, elaboration of interventions proposals and the intervention itself. The activity reported by I₆ exemplifies this understanding:

I gathered about 120 students in an asylum. An asylum here in [...] with about 90 seniors citizens. I gathered all my classes. We renovated the electrical installations on a weekend. Then everything went: design, electrical part. On another weekend we had a party. So the seniors stayed all day with the students. Then we went to other ladies' home. There were about 200 old people there and the students in the middle, you what I mean? Then the students began to see: “Life, society”. There was a student who had never seen an asylum, as how it is to be old. And there you see concept of engineering, project, quality, from the quality of life. And then things start to close. That's what makes the difference (I₆, Electrical Engineer).

The way to develop the strategy “teaching by projects”, mentioned by the interviewee above, corresponds to what numerous authors (Godoy, 2009; Martins, 1985; Masetto, 2003; Nérici, 1977; Piletti, 1986) define as an activity that intends to address or solve real problems and/or situations, so that the student is involved in the analysis of the situation, in the elaboration of intervention proposal and in the execution of the project.

In relation to “virtual learning environments”, teachers' reports show that features such as e-mail, storage services and the provision of personal files and pages are widely used. Sixteen (16) out of the seventeen (17) teachers interviewed reported that they use them to facilitate communication between teacher and students and to provide teaching or support material. The report from I₅, below, clarifies how these teachers use some resources:

In fact, it's like this: I use the Moodle. It has the course page in the Moodle. This is the virtual environment. And I use more as a repository. I put all the content taught: the Teaching Plan is there also. If I need to talk to them (students), my office hours are there too. From there weekly I put the content given, because sometimes, we do not follow the Teaching Plan. So for those who missed the lesson: “this was seen, this and that”. Then if you want to study, it's there. I put the lists of exercises. If you need to send a message, I'll send it by Moodle. I put proof notice: “the evaluation will be on the Xth day”. I put the notices there. I use it more like that (I₅, Civil Engineer).

The organization, storage, availability of electronic files and communication with students provided by these resources were considered as “life-enhancing” benefits for both students and teachers, in view of documents available and agility in communication. Only one (1) of the seventeen (17) respondents reported that he does not use information and communication

technology resources to provide material or communication with students. Let's look at the I8 report:

I do not use it. It's just that. I've tried it and it's not efficient, you know. Well, let's put it like that, the number of questions which come in my email is virtually zero. Last semester, for example, I took a certain exercise, resolved, scanned and emailed to the students. Nobody understood the solution. This is so, because you need a sequence. There in the figure things appear the same as this page, all words are here. Now, if this depends on a logical sequence to be determined, there is no way! (I8, Electrical Engineer).

For this teacher, the computerized resources do not extend the communication between teacher and students nor contribute to the teaching-learning process, since they do not replace the explanation of the teacher, so necessary to show the details and to clarify complex processes. Only two (2) of the seventeen (17) teachers interviewed reported the use of technological resources such as websites and blogs. Let's see how I6 uses these features in its classes:

I work a dynamic where I put some conditions of life, for example: the undergraduate student has a minimum wage, an engineering salary, managed to receive an "x" value and have to choose a property. Then he will research the property. It goes on sites researching real estate and real estate. And then the groups choose real estate. But I want them to choose properties with attributes. What are attributes? Is to choose properties with 3 bedrooms, have pharmacy near, etc. Then I can get into the concept. But they have to have this access to information technology to be able to search, to enter websites. And then you bring a lot of other things, like urban zoning and public transportation. I could give a definition in 5 minutes, but the student would forget at the end of the class. These resources allow the teacher to exemplify in much more depth the concept he is conveying to the students. I think this is the big thing (I6, Electrical Engineer).

For the interviewee, the use of websites and blogs has produced good effects in order to provide in-depth understanding in the content discussed in the classroom and in the motivation of the students. Regarding to other teaching strategies identified in the questionnaire in the first phase of the study, the reports show that strategies such as "case study", "field study", "seminars", "themes debate", "group debates", "texts study", are used eventually. "Inquire-based learning" is understood as the simple search for information about techniques, norms, data, and information for problem solving or project elaboration. The other strategies, in general, are not used because they are not considered appropriate to the content of the subject matter taught or because the teachers do not know them or master their use. The next session brings the integration of the quantitative and qualitative results of the study.

INTEGRATION OF QUANTITATIVE AND QUALITATIVE RESULTS

While the questionnaire used in the quantitative phase provided the identification of which were the strategies most used by teachers, the qualitative phase provided an in-depth understanding of why and how these strategies were used. The results obtained in the quantitative study showed that the most used teaching strategies were: "lecture" and "dialogic lecture". In the qualitative phase, the same teaching strategies were mentioned by the teachers as the most used. However, by examining in-depth of how these teaching strategies were used it was possible to perceive two important aspects.

The first aspect refers to the different ways of understanding and applying the following strategies: "exercise solving", "problem-based learning", "practical classes" and "teaching by

projects". These differences reveal the lack of uniformity, consensus among teachers, about teaching strategies, which are tools that are supposed to be used in a daily basis. The second aspect concerns the relationship between concepts from the engineering area and how to understand and apply "practice class" and "teaching by projects", which suggests the influence of the training area of the majority of teachers interviewed.

Related to the use of "virtual learning environments", the two phases of the study showed that they are mainly used to make materials available and communication with students. In addition, the qualitative findings showed that teachers seek the development of classes in which the dialogue between them and students prevails, that is, students are actively involved in the activities developed and that these activities require the students cognitive aspects such as the ability to analyze, establish relationships, creativity and decision-making. These practices suggest the adoption of some principles of active methodologies. A summary of the main results obtained in the quantitative and qualitative phases of the study on teaching strategies are presented in Table 4, below:

Table 4 - Results of the quantitative and qualitative phases of the study related to the most used teaching strategies

Teaching Strategies	Quantitative Phase (% responses "frequently" and "always")	Qualitative Phase (How teachers use the strategy)
Virtual Learning Environments	84% (168)	Virtual learning environments are mainly used for communication, and provision of teaching and support material to the students
Lecture	76% (152)	Classes are only based on lectures , prevailing the transmission of the content by the teacher
Dialogic Lecture	75% (149)	There are moments of content exposure, but "chat" prevails, with frequent exchange of information between teacher and students
Exercise Solving	74% (147)	The solved exercises go beyond the application of rules, formulas, equations and processes already known. They also demand cognitive abilities superior to the automated application of rules and formulas, such as the capacity for analysis, relationship building, creativity, decision making
Executive Practical Class	70% (140)	Moments in which students apply concepts and methods studied during the course, through various activities such as participation in challenges, problem solving, project preparation and execution, presentation of seminars, observation and verification of equipment and environments, among others.
Problem-Based Learning	65% (130)	Encouraged discussions in the classroom and solving calculations. Activities in which the student engages in the identification, analysis and elaboration of proposals for real problems suggested by the teacher or identified by the students themselves.
Demonstrative Practical Class	52% (103)	A variety of activities are promoted, in which students are involved in problem solving, project preparation, application of concepts worked in the classroom
Teaching by Projects	49% (98)	Development of projects or parts of engineering projects

CONCLUSIONS

The purpose of this article was to identify the teaching strategies most used by teachers of undergraduate engineering courses at a university in southern Brazil. The main results indicates the still predominant position of the “lecture” and the “dialogic lecture” as the most used strategies, and the need for a more varied usage of strategies and procedures enabling students to be more active and to assume greater liability in their own educational process.

The results of the quantitative phase showed that teachers frequently use strategies such as “executive practical classes”, “problem-based learning”, “demonstrative practice class”, and “learning by projects”. These results may indicate a positive movement in the reorganization of university teaching process, however, the results in the qualitative phase showed that teachers have a different understanding and ways of applying these strategies. It was also identified that “virtual learning environments” are widely used, but mainly, for communication with students and availability of materials, without exploiting the potential that these resources offer for teaching. From a general perspective, the most used teaching strategies are those that go back to the traditional pedagogy, in which the process and contents are centered on the teacher, with little students’ participation.

The fact that other strategies that promote active learning and recognize different needs of individual students, asking them to assume liability for personal learning and promoting critical thinking and independent learning such as “technical visits”, “games”, “portfolios”, “concept maps” etc. are not used and sometimes not understood by teachers show a gap in teachers’ initial and continuing preparation.

There are practical implications for teachers and for the institution’s managers. Teachers need to engage in the search for more knowledge about teaching strategies that enable them to respond to the dynamics of the new generations through stimulating activities that provide students with experience, involvement and motivation. The need for teachers to improve their knowledge about teaching strategies is clear. The results have shown that strategies proposed by active learning are practically unknown to teachers despite being studied, discussed and disseminated not only in the area of didactics of higher education, but also in the area of engineering education.

It is also important to highlight the need for teachers to improve their knowledge about the use of new technologies as teaching and learning resources. Virtual learning environments (e-mail, websites, blogs, social networks, etc.) that have the potential to help motivation, increase active participation of students and improve learning, are mainly used within an instrumental perspective, for the establishment of communication between teachers and students and as a repository of teaching or support material. Thus, teachers are the leaders of these changes who must be able to implement various different teaching methods and procedures and to alternate them strategically encouraging creativity, problem solving, and experience-based learning.

As for the institution’s managers there is a need to create mechanisms to support teachers to master the didactic-pedagogical issues. One proposal of action in this sense is the creation of Insertion Programs for Beginners Teachers. Other is the creation of programs of continuing education focused on didactic-pedagogical issues. For Souza (2013), continuing education in higher education seeks to leave teachers in a position to re-evaluate and re-elaborate their knowledge built with practice. This training is intended to disturb teachers so that they can observe their actions, analyze whether what is being developed is leading to satisfactory results for the teacher and the students and to verify what needs to be changed to improve the learning process.

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Factors Affecting Impulse Buying In Alfamart Customers In Ujungberung Sub-District, Bandung

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ABSTRACT

Consumer behavior that draws in the behavior of the modern retail is impulse buying or commonly known as marketers with unplanned purchase. Impulse buying is part of a condition called unplanned buying or an unplanned purchase that is more or less happened to be different with the consumer's spending plan. Type of the research is field research. This study uses the data obtained from field studies by ways of observing, recording and collecting various information and data found in the field through case studies and surveys. Based on the research, the most dominant factor affecting impulse buying is spontaneous decision factor. Based on the results of descriptive statistics, spontaneous decision factor is characterized by a feeling of excitement and feeling of spirit.

Keywords: impulse buying, unplanned purchase.

INTRODUCTION

According to Utami (2010: 67) impulse buying or unplanned purchases are another form of consumer buying patterns. In accordance with its terms, the purchase is not specifically planned. Imaginary purchase occurs when the consumer suddenly experiences a strong and firm desire to buy immediately. This is due to several factors such as, emotions or moods, attractive prices, the response of the shopping environment, the perceived promotions of profit, and the high level of income. So it stimulates consumers to make unplanned purchases or impulse buying.

Ujungberung is a sub-district located in east Bandung, it has 661,258 Ha, consists of 5 urban villages, 58 hamlets, and 305 neighbourhoods. Ujungberung is an area of residential development with 64.654 population based on population data in December 2017. Along with the rapid development of population in Ujungberung, impacts on the development of retail business, where retail stores that is quite prominent in Ujungberung sub-district are Indomart, Alfamart and SB mart. Indomart, Alfamart and SBmart in Ujungberung are retail businesses

directly related to the final consumer with the aim to serve what consumer needs, namely an integrated shopping place that sells goods from daily necessities to various types of goods with volume transactions either small, medium and large. The goods are diverse, such as kitchen items, home furnishings, bathroom furniture, cosmetics, accessories and others so it may known as Minimarkets. Minimarket is also one of the modern retailers who feel the impulse buying made by customers in buying daily needs. This can be seen in table 1.1 below:

Table 1.1
Recapitulation of Minimarket Sales Turnover in Ujungberung Year 2017

No.	Retails	Sales Turnover
1	Indomart	Rp. 1.033.972.320
2	Alfamart	Rp. 1.840.820.300
3	SB Mart	Rp. 1.325.683.800

Source: Economic Section of Ujungberung, Bandung, Year 2018

Based on sales turnover data for the past 1 year (January through December 2017) above, the very fundamental difference of the three existing retail stores in Ujungberung indicates strong competition, and the optimal marketing strategy needed to increase sales turnover. In addition, the knowledge about consumer behavior in making purchases and also consumer desires are needed for marketers and essential for the survival of this retail business. This is the foundation of this research, that is to examine consumer behavior in Ujungberung which has characteristics in terms of making an unplanned purchase or impulse buying. However, this study only limit one minimarket in Ujungberung area, Alfamart.

RESEARCH METHODS

This study uses marketing management science approach. In addition, this research approach uses descriptive methods. Descriptive research conducted in this study aims to create a description or description systematically, factually and accurately about the facts about impulse buying. This research uses questioner as main data collection tool. (Aaker, Kumar, Day, 2004: 75-77). The type of this research is a field research, meaning the data that obtained from field research by observing, recording and collecting various information and data found in the field through case studies and surveys. In order to collect various information needed in this research, questionnaires used in direct visits to the research site, Alfamart in Ujungberung.

RESULTS AND DISCUSSION

Description of the variables category describes the responses of respondents regarding the behavior of impulse buying on minimarket Alfamart customers in Ujungberung, Bandung. The results of research data that has been obtained then categorized into five groups of categories with the formula that has been determined in determining the level. Data analysis is as follows:

Spontaneous Decision

Spontaneous decision is a decision that arises because the emergence of the problems that occur suddenly. The process or stage of purchasing decisions occurs when a consumer recognizes an insatiable need. Understanding the types of consumer decisions will make it easier for marketers to identify the needs of consumers. There are three types of consumer decision making processes such as, broad problem solving, limited problem solving, and custom decision making processes (Utami, 2006: 36).

Based on interviews one of the informants. obtained information that during this spontaneous decisions arising from consumers if observed further is because if they are longer inside the store, this could increase the opportunity for spontaneous purchases. Because the decision making process to make a purchase can be done in the store, it's important for us to provide

convenience to consumers inside the store because it can affect the process of spontaneous purchasing decision. While the results of descriptive analysis for the dimensions of spontaneous decision factors obtained the minimum value of which can be seen from the table as follows:

Table 1.2.
Spontaneous Decision Factors Affecting Impulse Buying

Factors	5	4	3	2	1	Score	Average
When I see a product that I really want, I'll buy it sooner even though I have not planned to buy it yet	14	36	27	12	11	330	3,30
I bought the product I first saw spontaneously	18	12	39	22	9	308	3,08
The existence of spontaneity when I see the product in the supermarket to have	13	25	39	12	11	317	3,17
Total						955	9,55

Source: Research Results, 2018

Spontaneous decision factor based on consumer perception is in high category, or in other words Alfamart consumer in Ujungberung, Bandung always tend to make spontaneous purchasing of goods offered by retailers. From the table shows that the respondents who rated the impulse buying variable is in the high category by 11.65%. This result is in line with the theory put forward by Rook in Cahyorini and Rusfian (2011), that impulsive purchases occur unexpectedly and motivate consumers to buy as well, often because of the response to visual point of sale stimulus.

Reflect Decision

Consumer reflex decisions are one of the factors that may occur impulsive buying behavior. In order to fulfill the daily needs, a consumer must choose the products and/or services to be consumed. The number of options available, the conditions at hand, and the underlying considerations will make the decision of one individual different from the other. From the results of interviews with one of the sources in this research, obtained information that Alfamart customers in Ujungberung, Bandung tend to have a fairly reflective behavior, that is when consumers see a certain item on display retailers, they immediately make decision to buy directly without any consideration first. The result of descriptive analysis for the dimension of reflection decision factors obtained minimum value which can be seen from the table as follows:

Table 1.3.
Reflect Decisions Factors Affecting Impulse Buying

Factors	5	4	3	2	1	Score	Average
When I see something really interesting to me, I will buy it without considering the consequences	14	36	27	12	11	330	3,30
I will think over and over before deciding to buy a product	18	12	39	22	9	308	3,08
I will still buy products that I find interesting even if they do not need them	13	25	39	12	11	317	3,17
Total						955	9,55

Source: Research Results, 2018

Reflect decision factors based on consumer perception is in medium category, or in other hand, Alfamart consumer in Ujungberung, Bandung, when going to shop a product of goods that exist in retail outlet always make first consideration of goods to be purchased. In addition, this is also caused, when a new consumer will make the first purchase of a product, the considerations that will be based will be different from purchases that have been repeatedly done. These considerations can be processed by the consumer from an economic point of view, relationship with others as a result of social relationships, rational cognitive analysis results or more to emotional uncertainty (emotional element). The results of research on the dimensions of reflect decision factors in impulse buying activities in line suggested by Schiffman and Kanuk (2004) which illustrates that at the time of making decisions, all these considerations will be experienced by consumers although the role may vary.

Sudden Decision

The decision making process begins with a need to strive for. The fulfillment is related to several alternatives so that an evaluation is needed to obtain the best alternative from consumer perception. In the process of comparing these consumers requires information that the number and level of importance depends on the needs of consumers and the situation it faces. Consumer theory goes through all five phases on each purchase. Hence, on regular purchases, consumers sometimes skip or reverse some of those stages. Considerations that arise when a consumer faces a new purchasing situation can be complex. Based on the interview results with one of the sources in this research, turns out that Alfamart customers in Ujungberung, Bandung, rarely take a sudden decision to purchase something, unless if there is a sudden insistence when they see a product that is displayed or the money they have, making their decision to buy an item will surely come by itself without their any of the previous plans. The results of descriptive analysis for the dimensions of sudden decision factors, obtained the minimum value as shown from the following table:

Table 1.4.
The Sudden Decision Factors Affecting Impulse Buying

Factors	5	4	3	2	1	Score	Average
When I look at things that really interest me, I'll buy them at once, just to fulfill the desire that comes	37	14	19	18	12	346	3,46
I will still buy products that I find interesting though in the end I will regret	7	23	33	19	18	282	2,82
I will buy a product, if the product is very important to me	37	39	9	6	9	389	3,89
Total						1017	10,17

Source: Research Results, 2018

Factor of a sudden decision based on consumer perception is in medium category, or in other words Alfamart consumer in Ujungberung, Bandung, when wanting to shop a product of goods at retail outlet always make first consideration of goods to be purchased rarely make any sudden decisions. This is because a consumer who will search and may also not seek additional information. If the consumer's driven strong and the product needed is within reach, would likely buy it. Otherwise, the consumer will keep it in memory or search some information related the need. Such is the case, what happens in the Ujungberung, Bandung, where consumers sometimes ask other people either friends, or their relatives to recommend a product that they will buy. The results of research on the consumers sudden decision factors in impulse buying activities in line with Schiffman and Kanuk (2004) which illustrates that at the

time of making decisions, all these considerations will be experienced by consumers although the role will vary.

Automatic Decision

In taking an automatic decision, consumers rank brand and create purchase intentions. In general, consumer purchase decisions will buy the most preferred brand, but there are two factors that arise between the buying trend and the purchase decision. From the results of interviews with one of the informants in this research obtained the result that, before making a purchase, usually a consumer pay attention to advertising products, products used by friends, and conversations about the product. The results of descriptive analysis for the last dimension or automatic decision factor obtained the minimum value that can be seen from the following table:

Table 1.5.
Automatic Decision Factors Affecting Impulse Buying

Factors	5	4	3	2	1	Score	Average
The existence of an interesting product makes me want to try it	17	39	29	6	9	349	3,49
I cannot suppress my desire to buy a product when looking at a product that is interesting	33	10	29	17	11	337	3,37
The advertised product just like in television made me want to try	23	34	29	10	4	362	3,62
Total						1048	10,48

Source: Research Results, 2018

The automatic decision factor based on consumer perception is in the high category, or in other words Alfamart consumers in Ujungberung, Bandung, tend to make purchases impulsively when consumers make a visit to retail stores in Ujungberung, Bandung. The existence of a search for information made by consumers of products served in electronic media such as television is one of the biggest factors that cause consumers to purchase impulse buying, in addition to the product with attractive design and make consumers tend to want to try it, though they never tried the product before. This result is in line with research conducted by Park (2006) where impulse buying often appears suddenly, quickly, spontaneously, more emotionally rather than rational, more often regarded as something bad than something good, and consumers tend to feel out of control when buying goods impulsively.

Crosstabulations Analysis

The result of cross tabulation analysis between age and gender of consumer with impulse buying behavior as follow:

Gender Factor Respondent

The result of cross tabulation analysis between gender of respondent with tendency to impulse buying based on the following table:

Table 1.6.
Gender Categories With Impulse Buying

Gender	Impulse Buying			Total
		Medium	High	
Female	Count	18	44	62
	% of Total	18%	44%	62%
Male	Count	21	17	38
	% of Total	21%	17%	38%
Total	Count	39	61	100
	% of Total	31%	61%	100%

Source: Primary Data, 2018

Based on the table above, it is known that female consumers have a tendency to make a high impulsive purchase as many as 44 people and female consumers who have tendency to do impulsive giving is as much as 18 people. Furthermore, male consumers who have a tendency to make purchases impulsively as high as 17 people and male consumers who have tendency to do impulsive giving is 21 people.

Based on the results of the above research, it can be concluded that female consumers have higher tendency to make impulsive purchases. In purchases made conventionally, men prioritize the function in shopping. Meanwhile women prioritize social experience, which is associated with identity and emotional involvement (Dittmar, Long and Meek, 2004). The results of this study are in line with Lin and Lin (2005) research results that say if female consumers have the tendency to be more impulsive in shopping than male consumers.

Age Factor Respondent

The result of cross tabulation analysis between age of respondent with tendency to impulse buying based on the following table:

Table 1.7.
Age Category With Impulse Buying Impulse

	Impulse Buying			Total	
	Range	Medium	High		
Age	18 - 23	Count	9	7	16
		% of Total	9%	7%	16%
	24 - 28	Count	8	10	18
		% of Total	8%	10%	18%
	29 - 34	Count	14	25	39
		% of Total	14%	25%	39%
	35 - 40	Count	5	11	16
		% of Total	5%	11%	16%
	Above 40	Count	3	9	12
		% of Total	3%	9%	12%
Total	Count	39	61	100	
	% of Total	39%	61%	100%	

Source: Primary Data, 2018

Based on the table above, it is known that consumers with the age of 18 - 23 years who have a tendency of high impulsive buying behavior as many as 7 people and consumers who have tendency of impulsive buying behavior is as much as 9 people. consumers with the age of 24 - 28 years who have a tendency of high impulsive purchasing behavior as many as 10 people and consumers who have the tendency of impulsive buying behavior are as many as 8 people. Next, consumers aged 29 - 34 years who have a tendency of high impulsive purchasing behavior as many as 25 people and consumers who have tendency of impulsive buying behavior are as many as 14 people. While, consumers aged 35 - 40 years who have a tendency of high impulsive buying behavior as many as 11 people and consumers who have a tendency of impulsive buying behavior are as many as 5 people. And the last is consumers with age 40 years and over who has a tendency of high impulsive buying behavior as many as 9 people and consumers who have tendency of impulsive buying behavior is as much as 3 people.

Based on the results of the above research, it can be concluded that consumers aged between 29 - 34 years have higher tendency to make impulsive purchase. It can be concluded that the results of this research can be seen from the difference in the behavior of impulse buying by age. The age range 18 - 39 years is the age range included in the early adult development stage. Bandung as one of the student cities with many campuses and dominated by the average

student is still young, it allows consumers in Retail Alfamart in Ujungberung dominated by students who have a young age, modern lifestyle that causes the tendency to do high enough impulsive purchases. But the results of this research differ from research conducted by Ghani and Farzhan (2010) which states that age has a negative effect on the behavior of impulse buying, meaning that the older a person the lower the tendency for impulsive purchases.

CONCLUSION

1. Spontaneous Decision Factors affect the customer to perform impulse buying, indicated by a significance value of 0.000. Hence the first hypothesis (H1) is, the higher the positive emotions of a person the faster the impulse buying decision, can be accepted. The second factor is the reflect decision factor affecting the customer to perform impulse buying, this is indicated by a significance value of 0.000 which is still below 0.05. The second hypothesis (H2) is, the faster the customer response on a product the faster the impulse buying decision can be accepted. The third factor is the Sudden Decision Factor affecting the customer to perform impulse buying, this is indicated by a significance value of 0,000 which is still far below 0.05. The third hypothesis (H3) is, the more customer interaction with the shopkeeper the faster the impulse buying decision, it is acceptable. The fourth factor is Automatic Decision Factors affecting the customer to perform impulse buying, this is indicated by a significance value of 0.000 which is still far below 0.05. Hence the fourth hypothesis (H4) is, the higher the desire to shop from customers it will automatically the faster impulse buying decision, can be accepted.
2. Spontaneous Decision Factors, Reflect Decision Factors, Sudden Decision Factors and Automatic Decision Factors, have a significant influence together on the desire to make impulse buying. This is shown from the value of F_{count} of 47.327 with F_{table} of 3.698 and a significance level less than 0.05, it can be said that the regression model can be used to predict impulse buying.
3. The most influential factor on impulse buying is spontaneous decision with t value equal to 7,806 and valueize coefficient beta 0,743, then followed by sudden decision factor with t value equal to 4,789 and valueize coefficient beta 0,289, followed by factor the decision to reflex with the value of t arithmetic of 3.866 and the value of standardize coefficient beta 0.353 and the last is the automatic decision factor with t value of 3.698 and the value of standardize coefficient beta 0.459.
4. The coefficient of determination is 0.754 or 75.4%. This means that the four factors (spontaneous, reflex, abrupt and automatic) in this study are only able to explain 75.4% of the variations that occur in the impulse buying variable. While other variations of $100\% - 75.4\% = 24.6\%$ are explained by other variables not described in this research model.

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Macroeconomic Factors and The Correlation of Stock and Bond Returns: Empirical Evidence from Kenya

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ABSTRACT

This paper investigated how macroeconomic factors affect the correlation between stock and bond returns in Kenya over the past decade (July2006-Dec2015) using the Arbitrage Pricing Theory (APT) and Capital Asset Pricing Model (CAPM) framework for a time series of data. The study aimed to validate that the correlation of stock and bond returns could be explained by their common exposure to macroeconomic factors. The link between the stock-bond correlation and macroeconomic factors was examined using OLS regression model. With the empirical tests aimed at answering the following questions: How does inflation affect the correlation between stock and bond returns in Kenya? How do the interest rates affect the correlation between stock and bond returns in Kenya? How does money supply affect the correlation between stock and bond returns in Kenya? And how does the business cycle affect the correlation between stock and bonds? Secondary data obtained from the Kenya Central Bank, the Nairobi securities exchange and the Kenya bureau of statistics from July 2006 – December 2015 was analyzed. The empirical results confirmed that inflation rate, interest rate and business cycle do have a significant and positive influence on the stock-bond correlation. Money supply was found to have a negative influence on stock bond correlation in this study. The Ordinary Least Square Regression Model confirmed long run relationship between stock-bond correlation and the macroeconomic variables under review. The model was found to be robust because it passed all the diagnostic tests.

Keywords: Macroeconomic, Stock-Bond Correlation, Co-Movement, Stock, Equity, Bond, Returns, Kenya, Nairobi Securities Exchange, Unit Root, Ordinary Least Squares, Interest rate, Money supply, Business Cycle, Inflation.

INTRODUCTION

Background of the study

Correlation analysis between stock and bond returns is one of the important statistical tools that determine diversification strategies in the financial econometrics sector (Shrestha, 2015). Various studies have established that stock-market volatility exhibits substantial variation over time and that stock volatility seems to be excessively based on the time-variation in the volatility of fundamental macroeconomic variables (e.g., (Schwert, 1989); Haugen, Talmor, and Torous, 1991; Whitelaw, 1994; (Campbell, Lettau, Malkiel, & Xu, 2001)).

A vast school of thought has also tried to understand the co-movements between the stock and bond markets returns (e.g., (Barsky, 1989); Fama and French, 1989; Shiller and Beltratti, 1992; Campbell and Ammer, 1993; and Fleming, Kirby, and Ost diek, 1998). Changes in return co-movements might be due to changing fundamentals (Campbell and Ammer, 1993), cross-market hedging (Fleming, Kirby, and Ost diek, 1998), or pricing influences related to time-varying economic uncertainty and possible regime shifting (Veronesi, 1999 and 2001). Baele, Bekaert, & Inghelbrecht (2010), observe that there is a growing literature documenting this time variation using sophisticated statistical models (see also Guidolin and Timmermann

2006) but much less work trying to disentangle its economic sources. In particular, the negative stock-bond return correlations observed since 1997 are mostly ascribed to a "flight-to-safety" phenomenon (e.g., Connolly, Stivers, and Sun 2005), where increased stock market uncertainty induces investors to flee stocks in favour of bonds. The large negative spikes in realized correlations at the end of 1997 and the end of 1998 are both indeed associated with steep decreases in stock market values, in October 1997, after a global economic crisis scare, and in 1998, in the wake of the Russian crisis and the collapse of the Long Term Capital Management (LTCM). However, the 2002-2003 negative correlations coincide with a deflation scare, where bad real economic prospects drove stock market values lower, while low inflation expectations drove up bond market values. In line with this intuition, Campbell, Sunderam, and Viceira (2009) recently propose a pricing model for stock and bond returns and assign a latent variable to capture the covariance between nominal variables and the real economy, which, in turn, helps to produce negative co-movements between bond and stock returns. Their article asks whether a dynamic factor model in which stock and bond returns depend on a number of economic state variables can explain the average stock-bond return correlation and its variation over time (Baele, Bekaert, & Inghelbrecht, 2010).

Markowitz (1952) asserts that the estimated conditional correlations are broadly observed to be time varying with huge finance practical applications, such as asset allocation, risk management, and hedging. According to Andersson, Krylova & Vähämaa (2008), the comovements between stocks and bonds have, for instance, a direct impact on the formulation and implementation of investors' asset allocation and risk management strategies. In particular, investment strategies that assume a constant relationship between stock and bond returns may be improved by properly taking into account the observed time-variation in the correlation between these two asset classes. Furthermore, a better understanding of the timevarying co-movements between stocks and bonds may also be useful for monetary policy purposes. Although central banks do not have specific price targets for financial assets such as bonds or stocks, monetary policy authorities are increasingly using the information contained in the prices of these assets to gauge, for instance, market participants' growth and inflation expectations (Magnus A. et al, 2008).

The importance of correlation estimation has increased in the present day, due to its dynamic nature, especially during highly volatile periods. According to Connolly, Stivers and Sun (2005) and Gulko (2002), the correlation between stock-bond shifts from positive to negative during stock market crashes, referring for enhanced portfolio diversification. Ideally, for diversification purpose correlation needs to move from positive to negative sign, so that investors can obtain decoupling benefits. Decoupling, the return of assets moves in the opposite direction leading to maximization of diversification benefits during market crisis - that is the situation when diversification is highly required - due to flight-to-safety phenomena (Gulko, 2002). Flight-to-safety means investors shifting investment from risky assets to non-risky assets such as treasury bills and bonds as per response towards the sharp fall of stock market (Maslov & Roehner, 2004).

In addition to the fundamental changes in the macroeconomic environment, financial market dynamics and changes in market participants' assessment about risk may also have an important impact on the relationship between stock and bond returns (Andersson, Krylova, & Vähämaa, 2008). Gulko (2002) focuses on the stock-bond correlations around stock market crashes, and shows that the periods of negative stock-bond correlation tend to coincide with stock market crashes. In a similar element, Connolly et al, (2005) suggest that option-implied stock market volatility is a good indicator of financial market turmoil. They find that bond

returns tend to be high (low) relative to stock returns during days when implied stock market volatility is high (low) (Andersson, Krylova, & Vähämaa, 2008).

Further, a study done on G7 markets (Germany, France, United Kingdom, Switzerland, Japan, Canada and US) by Longin and Solnik (1995) analysed the existence of constant conditional correlation in cross country asset returns through Ljung-Box method and multivariate GARCH (1, 1) model. The analyses found both, time variant as well as constant conditional correlation, since Canada and France justified constant conditional correlation hypothesis. Whereas, remaining other countries (Germany, United Kingdom, Switzerland, Japan, and US) rejected the hypothesis and explained the presence of time varying conditional correlation (Longin & Solnik, 2001). Chui and Yang (2012) presented fusion time-varying conditional correlation while analysing three developed countries; U.S., U.K., and Germany. The positive correlation between stock-bond returns were estimated during both bearish and bullish periods, but the level of correlation was found to be relatively stronger during bearish periods in comparison to bullish period in U.S and U.K markets. However, German market displayed extremely negative correlation, indicating for enhanced diversification opportunities (Chui & Yang, 2012) (Shrestha, 2015).

In the near past, assets of Emerging Markets (EMs) have attracted high demand among the investors due to two major reasons. Firstly, as noted by (Panchenko & Wu, 2009), the financial liberalization policy in financial sector plays an important role to shift investment of global investors towards Emerging Markets' assets. Secondly, the undeveloped and premature securities markets of EMs which consist of small-and-medium size listed firms provide higher expected returns and acts as a fascinating factor towards the investors (Eun, Huang, & Lai, 2008). According to (Shrestha, 2015) participation of external investors in Emerging Markets are able to improve portfolio growth, as well as, gain risk diversification. Despite of such opportunities, very few earlier literatures are focused on co-movement between stock returns and long-term government bond returns, and explained the macroeconomic driving forces behind this relationship in Emerging Markets and more so markets in Africa such as Kenya.

An Overview of the Kenya Stock and Bond Market – Capital Markets

Long term capital is deemed crucial for economic development as evidenced by the positive relationship between long term capital and economic growth (Demirguc and Levine, 1996). The depth of the financial sector has generally been found to promote economic growth. It has also been observed that well-functioning capital markets increases economic efficiency, investment and growth. Capital market development is an important component of financial sector development and supplements the role of the banking system in economic development. Specifically, capital markets assist in price discovery, liquidity provision, reduction in transactions costs, and risk transfer. They reduce information cost through generation and dissemination of information on firms leading to efficient markets in which prices incorporate all available information ((Yartey & Adjasi, 2007), (Garcia & Liu, 1999)) Moreover, efficient capital markets not only avail resources to investors, they also facilitate inflow of foreign financial resources into the domestic economy. Capital market development therefore enables financial deepening by enabling the savers to diversify their financial asset basket and the firms to have access to alternative sources of financing.

The Kenya Stock Market – Nairobi Securities Exchange

Nairobi securities exchange – formally Nairobi stock exchange (NSE) was constituted in 1954 as a voluntary association of stockbrokers registered under the Societies Act (NSE, 1997a). It was mandated to develop the stock market and regulate trading activities. The evolutionary process of the NSE can be divided into various developmental stages defined by specific

institutional characteristics. Stage one is the initiation period before formalization of share trading (1920s-1953) while stage two (1954-1963) is the period when the market was formalized but before the political independence. The post-independence period which constitutes stage three (1964-1970) was the period before the Government made the first attempt to regulate the operations of the market. During stage four, the Government established the Capital Issue Committee (CIC) as a first attempt to oversee the operations of the stock market, (Ngugi, 2003). NSE has undergone gradual development marked by implementation of automated trading system in 2006, uploading of government bonds in the automated system in 2009 and becoming a member of the financial information service division of the software and information industry association (Mutuku, 2015). According to My Stock (2014), the NSE 20-Share Index (NSE 20) is the long-standing benchmark index used for equities traded on Kenya's Nairobi Stock Exchange (NSE) and represents the geometric mean of share prices of the NSE's 20 top stocks. The NSE 20-Share Index was introduced in 1964, one year after African natives were first allowed to trade on the NSE. It was joined in February 2006 by the NSE All Share Index (NSEASI), aimed at reflecting the total market value of all stocks traded on the NSE in one day rather than just the price changes of the 20 best performers captured by the NSE 20. Currently, the NSE has 65 listed companies, Agriculture 7, Automobiles and Accessories 3, Banking 11, Commercial and Services 10, construction and Allied 5, Energy and Petroleum 5, Insurance 6, Investment 5, Investment services 1, Manufacturing and Allied 10, Telecommunication and technology 1 and Real Estate Investment Trust 1(www.nse.co.ke).

The Kenya Bond Market

Corporate bonds were introduced into the market on November 22 1996 when the East Africa Development Bank (EADB) bond was issued at a price of 99% raising Kshs 600 Million. The bond was traded in denominations of Kshs 1 Million with an interest of 1.2 % points above the prevailing 91-day Treasury bill rate. Further the EADB launched a Kshs 2 billion medium term note, which was listed on the NSE Fixed Income securities market segment on 2nd May 2001, which was viewed as a break from the long-term debt instruments. Proceeds from the issue were intended for mobilization and lending in local currencies and for the development of a sustainable tool for alleviating the exchange risk associated with long and medium term borrowing in foreign currencies. The Shelter Afrique made a medium term note of Kshs 350M to be issued in three tranches, the first issued on the 8th December 2000, through a private placement to institutional investors. Proceeds from the sale were used for housing development in Kenya. The first locally controlled firm to offer bond was Safaricom whose proceeds were to be used to expand Safaricom and network coverage and capacity aiming to improve both the availability and reliability of their networks (Ngugi, Amanja, & Maana, 2006).

The government initially went for short maturity bonds issuing one-year floating bonds, with the first issue made in April 1997. The bond was lowly subscribed, with a subscription of 2.6 billion out of the Kshs 5 billion tendered. Low subscription was attributed to Central Bank failure to give sufficient notice for proper placement of the bond. The nominal annual yield was indexed 2.5 basis points above the 12-week moving average of the 91-day Treasury bill yield and reset quarterly. The government issued floating rate treasury bonds in September 1998 for one and two-year maturity expected to raise Kshs 5 billion. Subscription was low with Kshs 2.8 billion and Kshs 0.5 billion worth respectively. The low subscription was attributed to the liquidity crises among the few small banks during the month. These issues were part of the objective to shift the short term debt consisting mainly of Treasury bills to long term debt and also help address the inverse yield curve. Further, as indicated in 1998/99-budget speech, the government issued tax amnesty bond to encourage compliance with income tax act and a special bond aimed to cover outstanding payments due to the government contractors and

suppliers was issued. At the same time it was made a requirement that insurance companies should invest a minimum of 25% of their gross premiums in government securities, to provide liquidity to the bonds market (Ngugi, Amanja, & Maana, 2006). Maturities of the treasury bonds that have been issued so far range from 1-30 years (www.centralbank.go.ke).

The government has continued to expand borrowing for infrastructure projects by issuing infrastructure bonds and through the successful issuance of the eurobond in 2014, which generated USD 2 billion for the government and was oversubscribed fourfold. As observed by the IMF September 2014 report, the favorable terms of Kenya's first-ever eurobond, the largest so far in sub-Saharan Africa, reflects the favorable position of Kenya relative to other frontier markets. Of the proceeds, USD 600 million were used to repay a syndicated loan contracted in 2012 and the remaining was allocated to finance energy and infrastructure projects. The issuance comprised a five-year bond totaling USD 500 million and a ten-year bond totaling USD 1.5 billion (Odero, Reeves, & Kipyego, 2015).

Statement of the problem

According to Ologunde et al., (2006), the stock market plays a major role in financial intermediation in both developed and developing countries. The stock market avail long-term capital to the listed firms by pooling funds from different investors and allow them to expand in business by offering investors alternative investment avenues to put their surplus funds. As an economic institution, the stock market plays a major role of enhancing the efficiency of capital formation and allocation. Thus the overall development of the economy is a function of how well the stock market performs. Empirical evidence has shown that the development of a capital market is essential for economic growth (Ashaolu & Ogunmuyiwa, 2010). The stock market asset returns experience diverse variations as a result of changes, uncertainty and volatility of several factors in the market (Ologunde, Elumilade, & Asaolu, 2006). There is no doubt that futures, options and different kinds of derivative products have acquired an ever increasing importance in today's modern financial markets. However, since equities and fixed income securities, primarily corporate and government bonds, remain the major publicly traded financial instruments, accounting for more than a half of financial assets allocated all over the world (as McKinsey Global Institute shows in its 2011 report on global capital markets), the relationship between stock and bond markets takes one of the top researched topics during the last two decades (Murzaieva, 2013). Since the risk-return characteristics of stocks and bonds are very different, stock-bond correlation plays an important role in asset allocation, portfolio management and risk management. Stock prices and hence returns are generally believed to be determined by some fundamental macroeconomic variables such as interest rates, money supply, inflation, exchange rate, and Gross Domestic Product. Changes in stock prices are linked with macroeconomic behavior in advanced countries (Muradoglu et al., 2000).

Several studies explore various economic forces driving stock-bond correlation. Connolly et al. (2005, 2007) find that the future stock-bond correlation at higher daily frequency decreases with increasing stock market uncertainty in the US and several other major markets, arguably due to the flight-to-quality phenomenon. The same is confirmed in regard to many European markets by Kim et al (2006). According to d'Addona and Kind (2006), while the volatility of real interest rates may increase the stock-bond correlation in G-7 countries, the inflation volatility tends to reduce the correlation. By contrast an earlier study by Li (2002) argues that both the expected inflation uncertainty and the real interest rate uncertainty tend to increase the correlation between stock and bond returns.

Boyd et al. (2005) and Andersen et al. (2007) also investigate the effects of macroeconomic news announcements on stock and bond markets in expansions and recessions. They argue that the cash flow effect may dominate during contractions, while the discount rate effect may be more important during expansions, thus resulting in positively correlated stock and bond returns in expansions and lower, perhaps even negative, correlations during recessions. Ilmanen (2003) also proposes a similar argument. By contrast, Jensen and Mercer (2003) document that the monthly correlation between stocks and bonds is lower during expansions than during recessions which is essentially inconsistent with the flight-to-quality argument.

Kirui, Wawire and Onono (2014) posits that most of the African economies are fragile and resilient to both internal and external shocks hence macroeconomic factors are more likely to influence African investments returns (Kirui, Wawire, & Onono, 2014). Their study however concentrates on the effects of the macroeconomic variables to the stock market returns without specifically looking at how the factors specifically influence the co-movements between stock-bond returns. Most of the previous studies in the Kenyan context focus on the effect of macroeconomic variables on the performance and stock market growth.

In general, despite the fact that the effects of macroeconomic factors on correlations between stock and bond markets are intensively studied, there are no unified conclusions on strength and the direction of this relationship. Conflicting results among studies, obtained occasionally even for the same markets, can be explained by different time periods covered as well as different methodologies applied.

The current study examined the correlation between stock returns and long-term government bond returns, and endeavored to explain the macroeconomic driving forces behind this relationship in the Kenya perspective. The primary contribution of this paper was to test the link between macroeconomic factors and the stock-bond correlation by expanding the usual scope of this literature from developed markets such as the G7 markets, to Emerging markets like Kenya in order to enhance the robustness of the conclusions.

The main objective of this study was to explain the macroeconomic driving forces behind the correlation between stock returns and long-term government bond returns. Specific objectives are to investigate how inflation affects the correlation of stock and bond returns; examine how the interest rate affects correlation of stock and bond returns; investigate how Money supply in the economy affects the correlation of stock and bond returns and investigate how the economic business cycle affects the correlation of stock and bond returns.

Justification of the Study

Understanding the macroeconomic factor dynamics and their effects on the correlation between stock and bond markets returns is important for several reasons.

To Investors: The effect of macroeconomic factors to the co-movements between stocks and bonds returns have, for instance, a direct impact on the formulation and implementation of investors' asset allocation and risk management strategies. In particular, investment strategies that assume a constant relationship between stock and bond returns may be improved by properly taking into account the observed time-variation in the correlation between these two asset classes.

The Government of Kenya; a better understanding of the effects of variation in macroeconomic factors to co-movements between stocks and bonds may also be useful for monetary policy purposes. Although central banks do not have specific price targets for financial assets such as

bonds or stocks, monetary policy authorities are increasingly using the information contained in the prices of these assets to gauge, for instance, market participants' growth and inflation expectations. Hence, stock-bond return correlation estimates may offer policymakers useful complementary information to determine whether markets are changing their views on inflation or economic activity prospects.

Academic Researchers: they would benefit from this study as it would serve as a point of reference and a source of literature in their reviews while carrying out further studies on the topic under study more so in emerging markets. The research will add to the body of knowledge on the behavioral relationship between asset returns.

Scope of the study

Stocks and bonds are still the primary securities traded on stock exchanges and the major component of any optimal portfolio, especially in emerging markets. Since the risk–return characteristics of stocks and bonds are very different, determinants of stock–bond returns correlation plays an important role in asset allocation, portfolio management and risk management. This study will therefore seek to analyze the macroeconomic factors that determine the co-movement between stock and bond market returns in Kenya using weekly total return index of the Stock (Nairobi Securities Exchange Ltd All Share Index NSEASI) and Bond markets (The FTSE NSE Kenyan Shilling Government Bond Index) from January 2000 to December 2015.

The next section reviewed relevant literature while section three discussed research method. Section four contained results and discussions and the paper was completed with conclusions and recommendations in section five.

LITERATURE REVIEW

Theoretical Literature

The modern portfolio theory also known as the Markowitz portfolio theory originated from the work of Harry Markowitz who introduced the analysis of the portfolios of investments in his article "Portfolio Selection" published in the Journal of Finance in 1952. Markowitz included portfolio formation by considering the expected rate of return and risk of individual stocks and, crucially, their interrelationship as measured by correlation. Prior to this, investors would examine investments individually, build up portfolios of attractive stocks, and not consider how they related to each other. Markowitz showed how it might be possible to better of these simplistic portfolios by taking into account the correlation between the returns on these stocks. The diversification plays a very important role in the modern portfolio theory. Markowitz approach is viewed as a single period approach: at the beginning of the period the investor must make a decision in what particular securities to invest and hold these securities until the end of the period. Because a portfolio is a collection of securities, this decision is equivalent to selecting an optimal portfolio from a set of possible portfolios. Essentiality of the Markowitz portfolio theory is the problem of optimal portfolio selection (Markowitz, 1959).

When selecting the most desirable portfolio, indifference curves are used. Indifference curves represent an investor's preferences for risk and return. Following Markowitz approach, the measure for investment return is expected rate of return and a measure of risk is standard deviation. Based on the features of indifference curves: All portfolios that lie on a given indifference curve are equally desirable to the investor i.e indifference curves cannot intersect; and that every investor has a map of the indifference curves representing his or her preferences for expected returns and risk (standard deviations) for each potential portfolio (Levišauskaite, 2010).

There are two important fundamental assumptions when examining indifference curves and applying them to Markowitz portfolio theory: the assumption of non-satiation and the assumption of risk aversion. Under the assumption of non-satiation, investors are assumed to prefer higher levels of return to lower levels of return, because the higher levels of return allow the investor to spend more on consumption at the end of the investment period. Thus, given two portfolios with the same standard deviation, the investor will choose the portfolio with the higher expected return. On the other hand, under the assumption of risk aversion, investors when given the choice will choose the investment or investment portfolio with the smaller risk (Levišauskaite, 2010) (Markowitz, 1959).

As per the Modern Portfolio Theory (MPT), diversification is based on a dictum: “don’t put all your eggs in the same basket”. MPT explains that combination of two or more than two assets with uncorrelated or weakly correlated returns helps to reduce the risk level by generating volatility lower risk than when these assets are considered independently [for more see Kaplan (1985)]. So, the assets with low or negatively correlated returns are selected in portfolio diversification, in order to reduce the volatility effect without affecting expected return.

Financial economic theory assumes a positive relationship between the risk and return of an investment. The greater the risk taken, the higher the return can be realized and vice versa (Hull, 2012). The tradeoff between risk and return in portfolios of financial investments are actually a tradeoff between risk and expected return, not between risk and actual return. In financial calculations of expected return, the statistical definition of the expected value of a variable is applied (Hull, 2012). This definition states that the expected value of a variable is its average (or mean) value. Expected return is therefore a weighted average of the possible returns, where the weight applied to a particular return equals the probability of that return occurring. The possible returns and their probabilities can either be estimated from historical data or assessed subjectively (Hull, 2012). Based on the MPT theory, investors will be able to diversify their choices between Stocks and Bonds after gauging the expected risks and returns on each and how the returns correlate.

Developed by Sharpe (1964), the **Capital Asset Pricing Model (CAPM)** simplified Markowitz’s Modern Portfolio theory and made it more practical. Lintner (1965, 1969) and Mossin (1966), also contributed to the development of this theory as they investigated the effects risk had on the expected return of an investment relative to the market portfolio. Sharpe (1964) discovered that when forming the diversified portfolios consisting large number of securities, investors found the calculation of the portfolio risk using standard deviation technically complicated. Measuring Risk in CAPM is based on the identification of two key components of total risk: Systematic risk and Unsystematic risk. Systematic risk is associated with the market: purchasing power risk, interest rate risk, liquidity risk inter alia. Unsystematic risk is unique to an individual asset such as: business risk, financial risk, and other risks, related to investment into particular asset. Unsystematic risk can be diversified away by holding many different assets in the portfolio, however systematic risk cannot be diversified. In CAPM investors are compensated for taking only systematic risk. Though, CAPM only links investments via the market as a whole.

The essence of the CAPM is that, the more systematic risk the investor carries, the greater is his / her expected return. The CAPM being theoretical model is based on important assumptions: All investors look only one-period expectations about the future; Investors are price takers and they can’t influence the market individually; There is risk free rate at which investors may either lend (invest) or borrow money; Investors are risk-averse; Taxes and transaction costs are irrelevant; Information is freely and instantly available to all investors.

Following these assumptions, the CAPM predicts what an expected rate of return for the investor should be, given other statistics about the expected rate of return in the market and market risk. Several of the assumptions of CAPM seem unrealistic. Investors really are concerned about taxes and are paying the commissions to the broker when buying or selling their securities. And the investors usually do look ahead more than one period. Large institutional investors managing their portfolios sometimes can influence market by buying or selling big amounts of the securities. Overall, the assumptions of the CAPM constitute only a modest gap between the theory and market reality. But the empirical studies and especially wide use of the CAPM by practitioners show that it is a useful instrument for investment analysis and decision making in reality. For instance, Baele et al. (2010) used interest rates, inflation, cash flow growth rate, and the output gap to estimate stock-bond correlation in the U.S. market. Despite of significant results obtained from fundamental approach the Capital Asset Pricing Model (CAPM) of Sharpe (1964) by using inflation, interest rate, and economic growth, in order to interpret the relationship between stock-bond returns. These variables allow performing analysis on long frequency data such as monthly, quarterly, or annually. Unfortunately, such long frequency data are unable to capture the short-run shocks in the financial markets (for example, Bekaert and Grenadier (2001); Mamaysky (2002)). Thus, over the recent years, various advanced and modern tools have been implemented to analyze the short-frequency (weekly, daily, and hourly) asset returns correlation during stock market uncertainty. For example, Connolly et al. (2005) used daily stock and bond return series to examine link between stock-bond co-movement and stock market uncertainty. It presented the negative relation between uncertainty and future co-movement between stock and bond returns.

In a study to validate the model, Fama & French, (2004), suggested the portfolio theory that investors choose portfolios that are said to be mean-variance-efficient, and found along the efficient frontier for portfolios. The CAPM assumes that any portfolio that is mean-variance efficient and lies on the efficient frontier is also equal to the market portfolio. The implications of this, according to the authors, are that the relation between risk and expected return for any efficient portfolio must also hold for the market portfolio, if equilibrium is to be maintained in the asset market.

Rose (1976) proposes another form of the CAPM presented in his article "The arbitrage theory of Capital Asset Pricing", published in *Journal of Economic Theory* in 1976, what is currently known as the arbitrage pricing theory (APT) in which the return on an asset is specified as a function of a number of risk factors common to that asset class. The model assumes that investors take advantage of arbitrage opportunities in the broader market; thus, an asset's rate of return is a function of the return on alternative investments and other risk factors. The APT in contrast to CAPM acknowledges several sources of risk that may affect an asset's expected return. The key point behind APT is the rational statement that the market return is determined by a number of different factors. These factors can be fundamental factors or statistical. If these factors are essential, there to be no arbitrage opportunities there must be restrictions on the investment process. Here arbitrage we understand as the earning of riskless profit by taking advantage of differential pricing for the same assets or security. Arbitrage is widely applied investment tactic. It is important to note that the arbitrage in the APT is only approximate, relating diversified portfolios, on assumption that the asset unsystematic (specific) risks are negligible compared with the factor risks. There could presumably be an infinite number of factors, although the economic variables, to which assets having even the same CAPM Beta, are differently sensitive: inflation; industrial production; risk premiums; slope of the term structure in interest rates. In practice, an investor can choose the

macroeconomic factor that seems important and related with the expected returns of the particular asset.

Chen et al., (1986) in their first empirical investigation of the APT argued that the most basic level some fundamental valuation model determines the prices of assets. That is, the price of a stock will be the correctly discounted expected future dividends. Therefore, the choice of factors should include any systematic influences that impact future dividends, the way traders and investors form expectations and the rate at which investors discount future cash flows.

Jecheche (2006), argues that Multi-factor models allow an asset to have not just one, but many measures of systematic risk. Each measure captures the sensitivity of the asset to the corresponding pervasive factor. The author further contends that, the intuition for the result when assets have no specific risk, is that all asset prices move in lockstep with one another and are therefore just leveraged „copies“ of one other. The result becomes more difficult when assets lack specific risk. In such a case it is possible to form portfolios with a diversifiable specific risk. In order to achieve full diversification of residual risk, however, a portfolio needs to include an infinite number of securities. With a finite set of securities, each of which has specific risk, the APT pricing restriction will only hold only approximately.

Ferson and Harvey (1998) however, argue that the CAPM and APT have advantages and disadvantages as models of asset returns. The CAPM is seen as parsimonious and commonly employed by equity analysts, but requires a precise identification of the portfolio against which the asset is compared. On the other hand, Mosley and Singer (2007) contends that, APT accommodates multiple sources of risk and alternative investment, the model suffers from a similar challenge of identification since many factors, both international and domestic could influence an assets performance. The model, as with the CAPM, is subject to certain assumptions; the first of these being that investors may borrow and lend at the risk-free rate, there are no taxes and short selling of securities is unrestricted. The second assumption assumes that a wide variety of securities exist, thus risk unique to those securities may be diversified away, and lastly, investors are risk averse who aim to maximize their wealth. The criticisms of the model have centred on the generality of the APT itself. The APT sets no theoretical foundations for the factors that should be included in ascertaining the risk-adjusted return of the capital asset, and furthermore does not state the number of risk factors that should be included. The APT also presents certain methodological issues relating to the estimation of the model. Cheng (1996) points out that the model may be sensitive to the number of independent variables included in the linear regression. Evidence of this was found by Günsel and Çukur (2007). However, in both cases it was found that the applicability of the APT in establishing asset returns may still be valid.

APT and CAPM can however be explained by a single model as demonstrated by Bailey (2005) “If asset returns are explained by a single factor model, where the single factor is the market rate of return, then the prediction of the APT is identical with that of CAPM. It is possible for the CAPM and APT to be compatible with one another even if the return on the market portfolio is not one of the factors- indeed, even if the factors are not Portfolio return at all.” The examples of possible macroeconomic factors which could be included in using APT model: GDP growth; an interest rate; an exchange rate; a default spread on corporate bonds, inter alia. Including more factors in APT model seems logical. The institutional investors and analysts closely watch macroeconomic statistics such as the money supply, inflation, interest rates, unemployment, changes in GDP, political events and many others. Reason for this might be their belief that new information about the changes in these macroeconomic indicators will influence future asset price movements. But it is important to point out that not all investors or

analysts are concerned with the same set of economic information and they differently assess the importance of various macroeconomic factors to the assets they have invested already or are going to invest. At the same time the large number of the factors in the APT model would be impractical, because the models seldom are 100 percent accurate and the asset prices are function of both macroeconomic factors and noise. The noise is coming from minor factors, with a little influence to the result – expected rate of return.

The APT does not require identification of the market portfolio, but it does require the specification of the relevant macroeconomic factors. Much of the current empirical APT research is focused on identification of these factors and the determination of the factors' Betas. And this problem is still unsolved. Although more than two decades have passed since S. Ross introduced APT model, it has yet to reach the practical application stage. The CAPM and APT are not really essentially different; because they are developed to determine an expected rate of return based on one factor (market portfolio – CAPM) or a number of macroeconomic factors (APT). But both models predict how the return on asset will result from factor sensitivities and this is of great importance to the investor. Therefore, this study will employ the Bayesian Vector Autoregression (BVAR) model to determine the effects of macroeconomic variables (Expected inflation, unexpected inflation and the real interest rate,) on the co-movement of stock bond returns in Kenya for the period of 2000 to 2015.

Pioneered by John Maynard Keynes in (1971) the **liquidity preference theory** states that interest rates change to equate the demand for money with the supply. If demand for money rises, (that is, if people decide they would prefer cash to interest-bearing securities) they sell them, and bond prices fall: i.e. interest rates rise. Likewise, if the supply of money rises people will move into bonds, the price of which will rise: i.e. interest rates fall. A consensus subsequently emerged among most economists that there was a long-run equilibrium rate of interest, representing the expected rate of return required to defer sufficient consumption over a given period (i.e. save) to meet investment demand. However, more contemporary economic thinking has tended to reject the notion of single longrun equilibrium. Instead, concepts such as Professor James Tobin's "Portfolio Selection Theory" focus on the choices made by both firms and households between a wide range of physical or financial assets, each generating varying returns (i.e. having different prices). These choices can in turn be affected by all kinds of financial or other event. A real economy, in other words, is a "Spider's web" of complex interconnections, where interest rate levels and their effects cannot be predicted from any simple theory of long-run equilibrium (Keynes, 1971-1989).

Contrary to the neoclassical "special case" interpretation, Keynes considered his liquidity preference theory of interest as a replacement for flawed saving or loanable funds theories of interest emphasizing the real forces of productivity and thrift. His point was that it is money, not saving, which is the necessary prerequisite for economic activity in monetary production economies. Accordingly, turning neoclassical wisdom on its head, it is the terms of finance as determined within the financial system that "rule the roost" to which the real economy must adapt itself. The key practical matter is how deliberate monetary control can be applied to attain acceptable real performance. In this regard, it is argued that Keynes's analysis offers insights into practical issues, such as policy credibility and expectations management, that reach well beyond both heterodox endogenous money approaches and modern Wicksellian orthodoxy, which remains trapped in the illusion of money neutrality (Bibow, 2005).

Empirical Literature

Stock-Bond Correlation

Prior literature is divided into two distinct opinions regarding the relationship of the two assets: First, stock-bond returns are positively correlated, due to involvement of common macroeconomic conditions such as real interest rate, inflation rate, and economic growth situation (Li 2002; Gulko 2002). Second, the presence of negative correlation or shifting from positive to negative co-movement occurs when stock market volatility increases (Baele, Bekaert & Inghelbrecht 2010; Campbell and Ammer (1993); Connolly et al. 2005; Kim, Moshirian & Wu 2006). (Shrestha, 2015) explains that during the stock market uncertainty, investors highly oppose the risks as a result bond asset becomes highly attractive in comparison to equity or other riskier assets, so the investors shift capital from stock market to the bond market, perceiving bond as risk free assets, which creates “flight-to-safety” or “flight-to-quality” phenomenon (for more De Goeij and Marquering 2004; Baur and Lucey 2009). In contrast, when economies experience expansion in stock market then investors become less risk-averse. Therefore, risky assets or stock market become more attractive towards investor and investment in stock increases, which finally lead to “flight-fromquality” phenomena (Baur & Lucey 2006). So, these two phenomena seem to be responsible to have negative correlation between stock and bond return. On the other hand, there are some works which indicate mixed signs correlation between asset returns (Yang et al. 2009; Ilmanen 2003). Hence, yet there is an absence of strong evidence in existing literature to answer whether the conditional correlation between stock and bond returns are positively or negatively correlated (Shrestha, 2015).

Various studies have been undertaken using diverse methods in order to understand appropriate joint behaviour between stock and bond markets. Saleem (2011) examined the relationship between the stock and the bond market of Russia. The researcher used multivariate conditional volatility models, such as, Bollerslev (1990) CCC model, Engle (2002) the DCC model, where the author first examined whether the correlations between two classes of assets were constant or time varying. Secondly, he investigated the asymmetries in conditional variances, covariances, and correlations, an asymmetric version of the DCC model proposed by Cappiello et al. (2006) is adopted. The study’s empirical results did not support the assumption of constant conditional correlation but there was clear evidence of time varying correlations between the Russian stocks and bond market. Both asset markets exhibited positive asymmetries (Saleem, 2011).

Andersson et al, (2006) examined the impact of inflation and economic growth expectations and perceived stock market uncertainty on the time-varying correlation between stock and bond returns. The empirical analysis in this paper was performed using daily data on US, UK, and German stock and bond returns. The researchers used two methods to measure the timevarying correlation between stock and bond returns: a simple rolling window sample correlation, and the dynamic conditional correlation (DCC) model proposed by Engle (2002). The results of their study indicated that stock and bond prices move in the same direction during periods of high inflation expectations, while epochs of negative stock-bond return correlation seem to coincide with subdued inflation expectations. Furthermore, consistent with the “flight-to-quality” phenomenon, the results suggested that periods of elevated stock market uncertainty lead to a decoupling between stock and bond prices. Finally, this study found that the stock-bond return correlation was virtually unaffected by economic growth expectations (Andersson, Krylova, & Vähämaa, 2008).

Stivers and Sun (2002) analysed the relationship between stock and bond in short-run by the help of regime-switching models and discovered the flight-to-quality phenomena. This study

found conditional correlation between asset returns, as well as, that the trade volume of capital market declines during financial turmoil. On the other hand, investors became active in portfolio diversification in order to reduce the risk level associated with specific investment. So, the asset price and mean returns became incompetent to demonstrate the relationship between assets demand, primarily demand of complementary assets, such as bond and equity (Fanga & Limb 2004).

Chiang, Li, and Yang (2014) considered stock and bond market uncertainty as essential factors which determine the sign of correlation between asset returns. Where, stock market uncertainty led to negative correlation, and positive correlation assumed to be obtained by bond market uncertainty. Similar results were proposed by Connolly et al. (2005), since increase in stock market uncertainty increased demand in bond market. The increase in bond yield believe to bring the downfall in bond and stock prices, thus the correlation is highly determined by bond market risk.

Shrestha (2015) estimates long-run time variant conditional correlation between stock and bond returns of CIVETS (Colombia, Indonesia, Vietnam, Egypt, Turkey, and South Africa) nations. The study further, analyses the presence of asymmetric volatility effect in both asset returns, as well as, observes increment or decrement in conditional correlation during precrisis and crisis period, which lead to make a reliable diversification decision. The Constant Conditional Correlation (CCC) GARCH model of Bollerslev (1990), the Dynamic Conditional Correlation (DCC) GARCH model (Engle 2002), and the Asymmetric Dynamic Conditional Correlation (ADCC) GARCH model of Cappiello, Engle, and Sheppard (2006) were implemented in the study. The study analyses found strong evidence of time-varying conditional correlation in CIVETS markets, excluding Vietnam, during 2005-2013. In addition, negative innovation effects were found in both conditional variance and correlation of the asset returns. The results of this study recommended investors to include financial assets from these markets in portfolios, in order to obtain better stock-bond diversification benefits, especially during high volatility periods (Shrestha, 2015).

Macroeconomic determinants of the correlation between stock and bond returns

The determinant factors of the correlation behavior of stock and bond returns has gained extreme emphasis among academics and practitioners, although stock and bond prices, in general, tend to move in the same direction, recent studies have also documented sustained periods of negative correlation. Stock and bond prices are the discounted sums of their future cash flows. Assuming there is no default risk, a stock's cash flow is an infinite stream of uncertain dividends, while a bond's cash flow is a fixed number of payments of predetermined coupon income. Evidently, factors that exclusively affect the discount rates are likely to move stocks and bonds in the same direction, while those affecting only stock dividends will reduce their co-movement (Li, 2002).

Altay (2003) conducted a study on the effect of macroeconomic factors on asset returns where a comparative analysis of the German and the Turkish stock markets was done in an APT framework. This paper used factor analytic techniques to derive factor realizations from a group of main economic indicators where the German economy yielded 4 factors, whereas the Turkish economy had only 3 factors even though the same economic indicators were employed in the factor analysis procedures. This study found some evidence of the unexpected interest rate factor and the unexpected inflation factor beta coefficients having significant effects on asset returns of the German Stock Market, but was not able to find any unexpected macroeconomic factor beta with a significant influence on asset returns in the Turkish Stock Market (Altay, 2003).

Zhu (2012) in the study “the effects of macroeconomic factors on stock return of energy sector in shanghai stock market” investigated the inflation rate, money supply (M2), exchange rate, industrial production, bond, exports, imports, foreign reserve and unemployment rate. The secondary data, collected from People’s Bank of China and the National Bureau of Statistics of China, were for the period beginning January 2005 to December 2011 with no any missing monthly observations. This study found that the exchange rate, exports, foreign reserve and unemployment rate have effects on the stock return of energy sector in Shanghai stock market (Zhu, 2012).

Aslanidis and Christiansen (2014) provide new insights into the role of macroeconomic fundamentals in explaining stock–bond correlations. They find that macroeconomic factors have only little explanatory power when the stock–bond correlation is largely positive; but when the stock–bond correlation is largely negative, then macroeconomic fundamentals are most useful explanatory variables. The rationale behind this finding is that macroeconomic factors are important for bonds in all periods, while for stocks they are important only in extremely volatile periods (Aslanidis & Christiansen, 2014).

Dimic, et al (2014) carried out a study on the impact of financial market uncertainty and macroeconomic factors on stock–bond correlation in emerging markets using data from 10 emerging markets (Argentina, Brazil, Bulgaria, Colombia, Mexico, Peru, Philippines, Russia, Turkey and Venezuela) and the U.S. spanning from January 2001 to December 2013, leading to the sample size of 156 observations for all markets included in the study. The study employs the wavelet analysis approach; which enable the researchers to examine stock–bond correlations over different time horizons in ten emerging markets. The study found that stock–bond correlation patterns vary significantly between the time horizons. In particular, the correlation in short horizon changes the sign rapidly showing sustainable negative episodes while the correlation in long horizon stays positive most of the time. The study also concluded that the most important factor influencing stock–bond correlation in short horizon is the monetary policy stance, while the factors with the greatest long-term impact are inflation and stock market uncertainty. Finally, global stock market uncertainty played a more significant role than global bond market uncertainty in explaining stock–bond correlations in emerging markets (Dimic, Kiviaho, Piljak, & Äijö, 2014).

This study examined the following macroeconomic factors and how they influenced the correlation of stock-bond returns:

Inflation rate and correlation of stocks and bond returns

The inflation rate is the rate of increase of a price index (for example, a consumer price index). It is the percentage rate of change in price level over time. The rate of decrease in the purchasing power of money is approximately equal (Mishni, 2004). The effects of inflation as a macroeconomic factor on the financial markets and the aggregate economy are diverse and can be both positive and negative. The negative effects are however most pronounced and comprise a decrease in the real value of money as well as other monetary variables over time. Several scholars have used different models to examine the effect of inflation on correlation of stock bond returns.

Fama and Schwert (1977) did a study to estimate the extent to which various assets were hedges against the expected and unexpected components of the inflation rate during the 1953-1971. Their study found that U.S. government bonds and bills were a complete hedge against expected inflation and private residential real estate was a complete hedge against both expected and unexpected inflation. The authors also found that labor income showed little short-term relationship with either expected or unexpected inflation. The most

anomalous result is that common stock returns were negatively related to the expected component of the inflation rate, and probably also to the unexpected component. Baele et al (2010) noted that Inflation and the output gap can affect the real term structure of interest rates and therefore affect both bond and equity prices. Because equities represent a claim on real assets, the discount rate on stocks should not depend on nominal factors such as expected inflation. Yet, a recurring finding is that stocks seem to be very poor hedges against inflation and their returns correlate negatively with inflation shocks and expected inflation (Fama & Schwert, 1977).

Li (2002) investigates how macroeconomic factors affect the correlation of stock-bond returns using data from G7 countries (U.S., the U.K., France, Germany, Japan, Canada and Italy). The data analysed started from 1958 to 2001. The asset pricing model was used which shows that stock and bond returns can be explained by their common exposure to macroeconomic factors. The link between the stock-bond correlation and macroeconomic factors is examined using three successively more realistic formulations of asset return dynamics. Their empirical results indicated that the major trends in stock-bond correlation were determined primarily by uncertainty about expected inflation. On the impact of uncertainty about expected long-term inflation on stock-bond return correlation, Li (2002) shows that greater concerns about future inflation tend to result in stronger co-movements between stocks and bonds. About expected inflation rate, Li (2002) noted that similar to the real interest rate, expected inflation moves stock and bond returns in the same direction. Greater uncertainty about this factor is likely to cause higher co-movement. Greater uncertainty about expected inflation and the real interest rate increases this correlation. In addition, uncertainty about the stock unique component reduces the stock-bond correlation by changing the volatility of stock returns. According to Li (2002), it is important to note that it is the uncertainty, rather than the levels, of the macroeconomic factors that affects the stock-bond correlation. Li (2002) concludes that if the economy is neutral to unexpected inflation shocks, then we expect the stock-bond correlation to decrease with higher uncertainty about unexpected inflation. Otherwise, the effect of unexpected inflation shocks cannot be determined. The effect of unexpected inflation is ambiguous and depends on whether the dividend yield and the real interest rate are affected by unexpected inflation shocks.

Ilmanen (2003) uses US data on stock and bond returns from 1929 to 2001 to examine the impact of inflation on the correlation between stock and bond returns, and finds that during periods of high inflation, changes in the discount rates dominate the changes in cash flow expectations, thereby inducing a positive stock-bond return correlation. The researcher explains that inflation rates had a large impact on stock and bond price correlation. When inflation rates were high, changes in the discount rate moved stock and bond prices in the same direction. When inflation was low, discount rates were relatively stable and economic uncertainty was tied to growth. As a result, the correlation between bond and stock returns decreased. In a period of deflation, the author suggests that stock-bond correlation may be negative because equity risk premiums rise and bond risk premiums decrease. He cites Japan as an example of negative correlation of stock and bond prices in a deflationary environment (Ilmanen, 2003).

Andersson et al. (2008) use data from the US, the UK, and German markets and find that inflation expectation is an important determinant of the stock-bond correlation, while economic growth expectation is not a relevant factor. Specifically, their result shows that stock and bond prices move in the same direction when inflation expectations are high (Andersson, Krylova, & Vähämaa, 2008).

Yang, Zhou and Wang (2009) conducted a study titled “The stock-bond correlation and macroeconomic conditions: One and a half centuries of evidence” using monthly stock and bond return data over a 150 years’ period (1855-2001) for both the U.S. and the U.K., this study documented time-varying stock-bond correlation over macroeconomic conditions (the business cycle, the inflation environment and monetary policy stance). The study observed different patterns of time variation in stock-bond correlations over the business cycle between U.S. and U.K., which implied that bonds may be a better hedge against stock market risk and offer more diversification benefits to stock investors in the US than in the UK. Further, found a general pattern across both the U.S. and the U.K. during the post-1923 subperiod and during the whole sample period: higher stock-bond correlations tend to follow higher short rates and (to a lesser extent) higher inflation rates (Yang, Zhou, & Wang, 2009).

Baele et al, (2010) studied the economic sources of stock-bond return co-movements and their time variation using a dynamic factor model on US data from 1970 - 2005. They identified the economic factors employing a semi structural regime-switching model for state variables such as interest rates, inflation, the output gap, and cash flow growth. They also viewed risk aversion, uncertainty about inflation and output, and liquidity proxies as additional potential factors. The study found that macroeconomic fundamentals contributed little to explaining stock and bond return correlations but that other factors, especially liquidity proxies, played a more important role. The macro factors were found to be still important in fitting bond return volatility, whereas the “variance premium” was critical in explaining stock return volatility. However, the factor model primarily failed in fitting covariances (Baele, Bekaert, & Inghelbrecht, 2010).

Zhou and Jeske (2012) conducted a study called “Unexpected Inflation Hedging: A 3D SUPER Approach” using U.S. data from January 1970 to June 2012. They argue that the most important type of inflation impacting asset returns is the unexpected, or surprise inflation because asset prices have already incorporated expectations on growth, inflation, and earnings, inter alia and that it is the surprise that moves the markets near term. The authors posit that high inflation may not be detrimental to bond returns if the expectations have already been incorporated into asset prices. Incidentally, some of the highest bond returns occurred in the early 1980s (April 1982 to April 1983: +35%) when expected inflation was still high but realized inflation surprised on the downside when the Fed, managed to get inflation under control. Zhou and Jeske (2012) conclude that what matters for asset prices is the inflation above or below what was expected, that is the unexpected inflation. On the reaction of asset classes to unexpected inflation, Zhou and Jeske (2012) assessed the sensitivities for unexpected inflation betas using U.S. data from January 1970 to June 2012 and found that nominal bonds had a large negative unexpected inflation beta. Zhou and Jeske (2012) explained that nominal bond returns typically reacts negatively to unexpected inflation when short-term interest rates rise and lift up the entire interest rate term structure. Through duration this effect is multiplied and incorporated into bond prices at longer maturities. On the effect to returns on equities, the authors explain that also stock returns have negative unexpected inflation betas despite sufficient literature on the view that equities are an inflation hedge in the very long-term (Ahmed, Salman, & Mirko, 2005) and (Mishkin, 1992), unexpected inflation still negatively affects equities in the short term. Zhou and Jeske (2012) concludes that due to countercyclical monetary policy, inflation adversely affects equity prices when financial markets price in the impact of tighter monetary policy and thus a cooling down of the economy (Zhou & Jeske, 2012).

Interest rates and correlation of stocks and bond returns

The interest rate can be defined as the annual price charged by a lender to a borrower in order for the borrower to obtain a loan. This is usually expressed as a percentage of the total amount loaned. Traditional theories define interest rate as the price of savings determined by demand and supply of loanable funds. According to John Maynard Keynes, interest rates were generally set in the market for loans. Other factors, however, were important: in particular, the liquidity preference of savers. The interest rate was determined by the level of reward they demanded for tying up their money in bonds or other assets rather than keeping it in cash. If savers believed that prices would fall (including those of financial assets), they would keep their money in cash. Hence the liquidity preference theory states that interest rates change to equate the demand for money with the supply. If demand for money rises, (that is, if people decide they would prefer cash to interest-bearing securities) they sell them, and bond prices fall: i.e. interest rates rise. Likewise, if the supply of money rises people will move into bonds, the price of which will rise: i.e. interest rates fall. A consensus subsequently emerged among most economists that there was a long-run equilibrium rate of interest, representing the expected rate of return required to defer sufficient consumption over a given period (i.e. save) to meet investment demand. However, more contemporary economic thinking has tended to reject the notion of single longrun equilibrium. Instead, concepts such as Professor James Tobin's "Portfolio Selection Theory" focus on the choices made by both firms and households between a wide range of physical or financial assets, each generating varying returns (i.e. having different prices). These choices can in turn be affected by all kinds of financial or other event. A real economy, in other words, is a "Spider's web" of complex interconnections, where interest rate levels and their effects cannot be predicted from any simple theory of long-run equilibrium.

Ngugi and Kabubo(1998) state that the primary role of interest rate is to help mobilize financial resources and ensure the efficient utilization of resources in the promotion of economic growth and development (Olweny & Omondi, 2011). Adam & Tweneboah, (2008) assert that, first, if an investor considers interest rate as cost of capital, an increase or a decrease in interest rate may affect the investment decision of the investors. For example, when there is a rise in interest rate and the opportunity cost goes up, individual investors would prefer to invest in non-fixed income securities such as bonds (Adam & Tweneboah, 2008). This may result either in profit or loss which is reflected in the firm's balance sheet. When the profit or loss of a firm is immediately announced, the stock price of a firm will increase or decrease. This implies that the valuation of a firm would either increase or decrease its stock price hence stock returns.

Campbell and Ammer (1993) employ a VAR to decompose the variance-covariance matrix of excess stock and bond returns. They identify two components that govern the stock-bond covariance: while unexpected shocks of the real interest rate drive returns of stocks and bonds in the same direction, expected inflation increases excess stock returns and lowers excess bond returns. Campbell and Ammer (1993) find that, for post-war US data, realized correlations are remarkably low. According to these authors, this can be explained by the low variability of real interest rates and by increases in expected inflation which drive correlation down (Campbell & Ammer, 1993).

Li (2002) in the study investigating how macroeconomic factors affect the correlation of stock-bond returns using data from G7 countries (U.S., the U.K., France, Germany, Japan, Canada and Italy from 1958 to 2001 emphasized the uncertainty about the real interest rate where they explain that higher uncertainty about the real interest rate tends to increase the comovement of stock and bond returns. The study found that the real interest rate determines how an

investor discounts stock and bond cash flows therefore concluding that interest rate shocks are likely to move stock and bond prices in the same direction (Li, 2002). Li (2002) argues that both the expected inflation uncertainty and the real interest rate uncertainty tend to increase the correlation between stock and bond returns. By contrast, d'Addona and Kind (2006) show that although the volatility of real interest rates may increase the stock-bond correlation in G-7 countries, the inflation volatility tends to reduce the correlation.

Money supply and the correlation of stock and bond returns

Monetary policy is one of the most effective tools that a central bank has at its disposal. The central bank uses monetary policy frequently to cause a desired level of change in real activities. These frequent changes in monetary policy are believed to have a significant effect on the financial market. It is important to analyze the relationship between the most effective economic policy, namely monetary policy, and one important determinant of the economy, the financial market (Maskay, 2007). Specifically, the relationship between the money supply and stock market prices and hence returns for bonds and equities. The price of a stock is determined by the present value of the future cash flows. The present value of the future cash flows is calculated by discounting the future cash flows at a discount rate. Money supply has a significant relationship with the discount rate and, hence, with the present value of cash flows (Maskay, 2007). According to Sellin (2001), money supply affects stock prices only if the change in money supply alters expectations about future monetary policy. The author argues that a positive money supply shock will lead people to anticipate tightening monetary policy in the future. The subsequent increase in bidding for bonds will drive up the current rate of interest. As the interest rate goes up, the discount rates go up as well, and the present value of future earnings decline (Sellin, 2001). As a result, stock prices decline. Furthermore, Sellin (2001) argues that economic activities decline as a result of increases in interest rates, which further depresses stock prices.

Ilmanen (2003) examined the correlation of U.S. stock and bond returns from 1929 to 2001. The author found that the correlation had been slightly positive over time, with intermittent periods of divergence. He finds that the major factors influencing the correlation between stock and bond returns are economic and monetary policy cycles, inflation rates, and volatility shocks. He emphasizes that an understanding of stock-bond correlations is important for long-term asset allocation decisions (Ilmanen, 2003). Fah (2008) studied the impact of several macroeconomic factors to the yield spreads between two Malaysian Government Securities (MGS) and 10-year MGS. The study found that GDP growth rates, industry production and money supply ratio are positively related to MGS yield spreads (Fah, 2008).

Carr and Smith (1972) in their *Journal of Money, Credit and Banking* investigated Money Supply, Interest Rates, and the Yield Curve using quarterly observations on Canadian data over the period 1Q 1952 to 4Q 1969. In this study, the authors examine how changes in the money supply affect nominal interest rates through changes in the real rate of interest and through changes in the expected rate of inflation, and empirically estimate these effects of money on interest rates. In so doing they also investigated the effects of money on short, medium, and long-term interest rates and derive the real yield curve. This study concludes that: unexpected monetary changes have a significant but temporary impact on real interest rates, with the greatest impact occurring on the short-end of the market; an increase in expectations of inflation leads to a significant increase in nominal interest rates; interest rates adapt relatively quickly to changes in the rate of inflation, the average lag being 12 to 2 years for short term interest rates and 2 to 3 years for long term interest rates and that the model formulated can be used to calculate real interest rates. The term structure for real interest rates resembles closely the term structure for nominal rates (Carr & Smith, 1972). Therefore, depending on the

effect of money supply on the inflation and real interest rates, the two components that govern the stock-bond covariance: unexpected shocks of the real interest rate will drive returns of stocks and bonds in the same direction, expected inflation will increase excess stock returns and lower excess bond returns (Campbell & Ammer, 1993).

Reilly and Brown (2000) in their book on investment analysis and portfolio management stated that increasing prices could severely affect bond prices if, of course, they are not indexed to inflation. This occurs when the rise (decline) of inflation puts an upward (downward) pressure on the required return of investors who want to keep the same real return on investment. In the case of emerging markets, inflation is also showed to be a leading indicator of the balance of payment crises and as a proxy for the quality of economic management thus directly influencing the sovereign default risk. This effect is particularly known due to the rule of Taylor (1993) who states that a 1% increase in inflation should prompt the central bank to raise the nominal interest rate by more than 1%, which should undoubtedly negatively affect the government bond prices. In addition, the increase of money supply can lead to a higher inflation in the future, so the quantity of money can predict the future consumer price movements and have the same effect on debt securities as inflation has. However, a share of increased money supply can be directed to debt securities markets, i.e. increasing the demand and the prices (Reilly & Brown, 2000).

Business Cycle and the correlation of stock and bond returns

According to Li (2002), many researchers argue that business cycles have a strong effect on asset returns (e.g., Rouwenhorst 1995) and international equity correlations (e.g., Erb, Harvey, and Viskanta 1994). Schwert (1989) shows that they can explain much of the time series variations in the stock return volatility. Therefore, a natural question is whether the stock-bond correlation varies at different stages of the business cycle. Li (2002) used the business cycle dates of Economic Cycle Research Institute (ECRI), who applied the same methodology used by NBER to the business cycles dating for major industrial countries. The author's results indicate that business cycle on effect on the stock-bond correlation, either in the U.S. or in the G7 panel (Li, 2002).

Dimic et al (2014) in their study on "the impact of financial market uncertainty and macroeconomic factors on stock-bond correlation in emerging markets" analyzed business cycle patterns as one of the domestic macroeconomic factors influencing stock bond correlation in the emerging markets, namely Argentina, Brazil, Bulgaria, Colombia, Mexico, Peru, Philippines, Russia, Turkey and Venezuela. In this study, the researchers used industrial production index as a proxy for domestic business cycle fluctuation. The study found business cycle to be the third influential macroeconomic factor for the stock-bond correlation in the long run, appearing significant in eight emerging markets under their review. Estimated coefficients of the industrial production index were positive and statistically significant in seven countries, specifically Argentina, Bulgaria, Colombia, Peru, Russia, Turkey and Venezuela. This result indicated that the domestic trend in growth may have similar effect on stock and bond returns in the long run, causing a positive correlation (Dimic, Kiviaho, Piljak, & Äijö, 2014).

Another study conducted by Durnez (2016) investigating if stock-bond return correlation in the BRIC countries is affected by their economic expansion. Durnez (2016) include industrial production as a proxy for business cycle like Dimic (2014). This study did not find business cycle to be a significant determinant of stock-bond correlation in BRIC countries, with the industrial production (their proxy for the business cycle) turning out to be only significant in two countries (Durnez, 2016).

Conceptual Framework – defining the economic variables

Inflation (INF): It is a persistence increase in general prices of goods and services. Measured by quarterly percentage change in consumer price index. Month on month inflation data is obtained from the Kenya central bank website ranging from July 2006 to December 2015.

Interest Rate (INT): The 91-day Treasury bill rate is used as a proxy for domestic rate of interest. A 30 day moving average is computed from the daily rate provided on the central Kenya of bank website.

Money Supply (M3): A measure of aggregate money supply that includes M1 and long-term money deposits. Measured by quarterly average of money supply. Monthly data is provided on the Kenya Central Bank Website.

The Business Cycles: These are the ups and downs in economic activity, defined in terms of periods of expansion or recession. During expansions, the economy, measured by indicators like jobs, industrial production, and sales, is growing in real terms, after excluding the effects of inflation. Recessions are periods when the economy is shrinking or contracting. Industrial Production (IP yoy growth rate); is included in this study as a proxy for the business cycles.

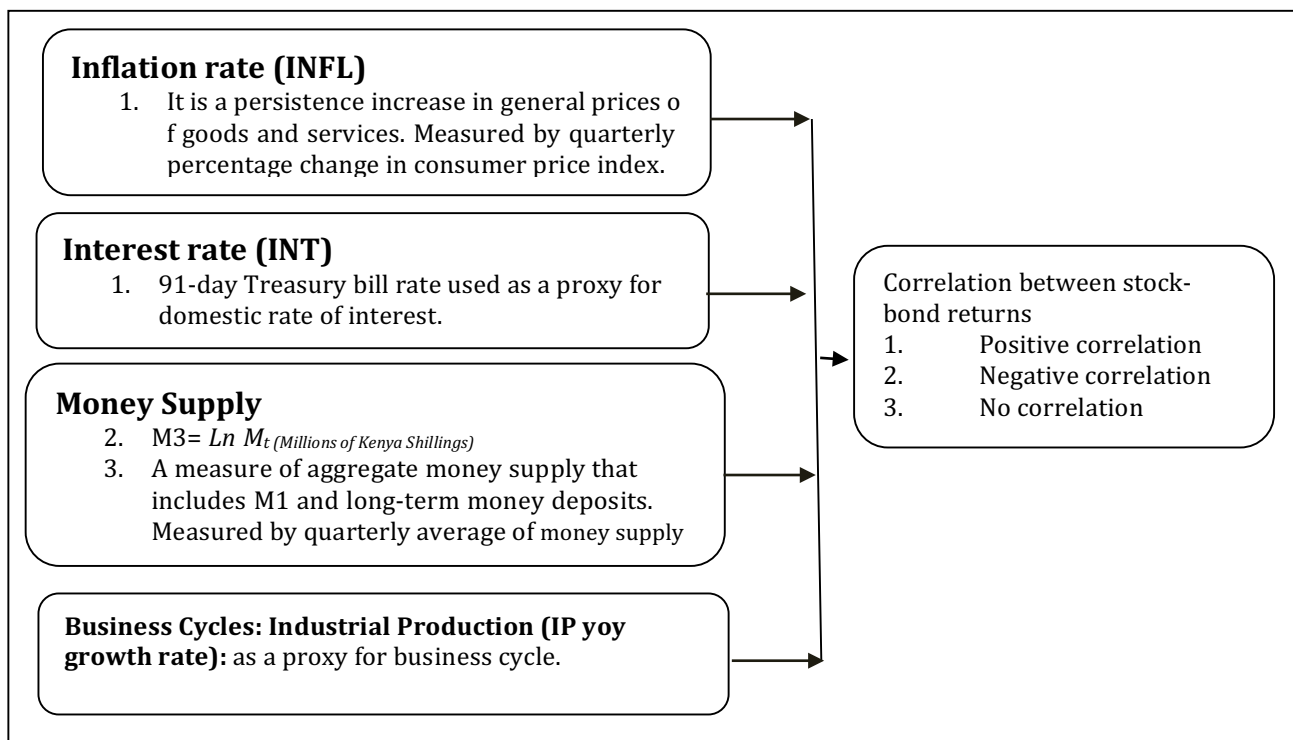


Figure 1: Conceptual Framework

Research Gap

A few key conclusions can be drawn from this literature review. Foremost, while existing theories assume a link between macroeconomic variables and the correlation between stock and bond returns, they do not specify the type or the number of macroeconomic factors that should be incorporated. Thus, the existing empirical studies, reviewed in this chapter, have shown the use of a vast range of macroeconomic variables to examine their influence on the correlation between stock and bond returns. The prior studies have also significantly enhanced our understanding of the link between financial markets and real economic activity, the findings from the literature are mixed given that they were sensitive to the choice of countries, variable selection, and the time period studied. It is difficult to generalize the results because

each market is unique in terms of its own rules, regulations, and type of investors. Still on Kenyan markets, of the reviewed literature, no specific one has attempted to scrutinize the effects of macroeconomic variables on the correlation between stock and Bond returns. Therefore, this study, to the best of my knowledge, is among the first empirical studies to consider the relationships between the Kenyan stock and bond returns and a set of macroeconomic variables from July 2006 to December 2015.

RESEARCH METHODOLOGY

Research Design

An explanatory design helps us to provide an explanation of causal relationships between variables, in this case macroeconomic factors and correlations between stock and bond market returns. Time-series regression analysis was employed to analyze the uncertainty, volatility and correlation which are very important aspects when the central issue is return of assets or investment for any financial activities.

Data Source

This study used secondary data from NSE, Kenya National Bureau of Statistics and the Central Bank of Kenya. Additional data obtained from published financial journals, internet, and relevant textbooks. Data on macroeconomic variables was obtained from the Kenya bureau of statistics. For the purposes of this study, monthly moving average return index of the Stock (Nairobi Securities Exchange 20 Index NSE20) and Bond markets (The FTSE NSE Kenyan Shilling Government Bond Index from July 2006 to December 2015) was computed for analysis.

Data Analysis and Procedures

The data that was used in this study comprised of indices from national stock and bond markets. The stock market data composed of commonly used stock indices for companies listed in the NSE 20. Both Quantitative and qualitative data was generated from the secondary data sources. The data imported into excel spreadsheets and then exported and analyzed using descriptive statistics by use of Eviews which enabled the researcher to draw conclusions and references. The quantitative data was further analyzed using descriptive statistics (frequency distributions, and percentages) and qualitative data was transformed into quantitative data by the way of tallies and frequency distribution and analyzed in the same way. Data was finally presented using tables and graphs. In order to establish the relationship between Macroeconomic factors and the co-movement between equity and bonds, the researcher conducted regression analysis.

Model specification

Firstly, the study identified significant macroeconomic variables in Kenya. The variables included in the model were variables which were found to be influential in previous research (Business Cycle/Industrial production, inflation and interest rate). Money Supply has been added to provide a view of the specific monetary policy environment in the country. The ordinary least squares method was employed to estimate the coefficients.

$$YCorr_t = \beta_1 + \beta_2 \cdot INFL_t + \beta_3 \cdot INT_t + \beta_4 \cdot IP_t + \beta_5 \cdot M3_t + \epsilon_t$$

Where:

YCorr = stock-bond return correlation

INFL = Inflation rate

INT = Interest Rate

IP = Industrial Production (yoy growth percentage) proxy for Business cycles

M3 =Money Supply

Et =Error Term

RESEARCH FINDINGS AND DISCUSSION

Descriptive Statistics for Variables

The tool used to determine the macroeconomic factors affecting correlation between stock – bond returns includes descriptive statistics, the unit root Augmented Dickey Fuller (ADF) test proposed by Dickey and Fuller (1979, 1981).

Table 4.1: Descriptive Statistics of Kenya Stock and Bond Returns July 2006 –Dec 2015

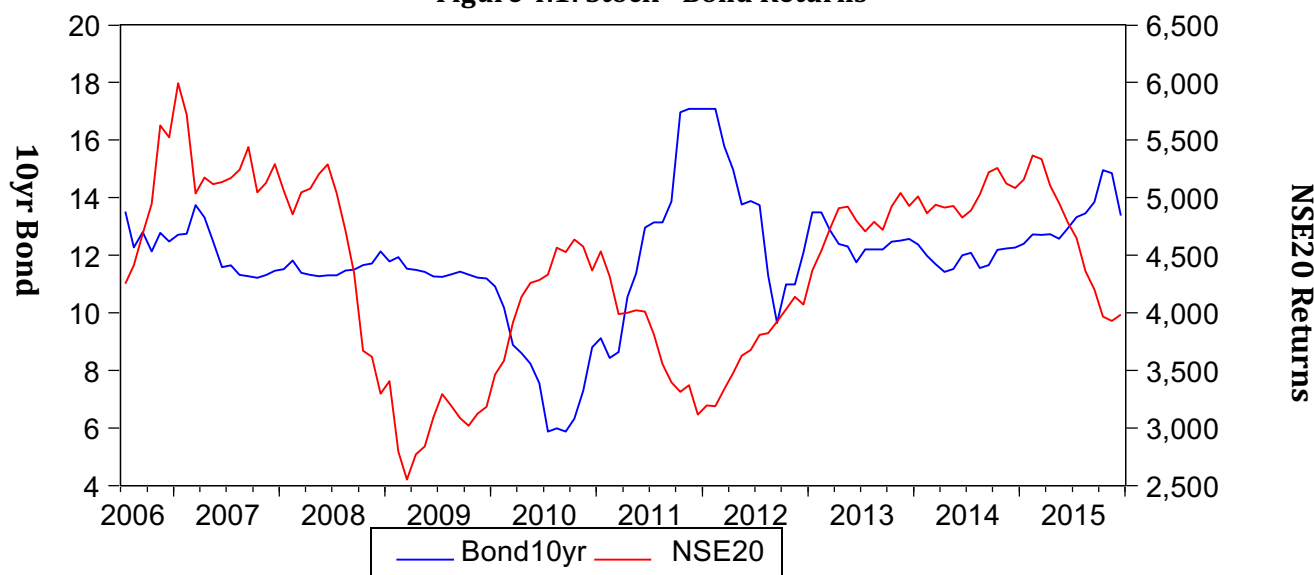
	BOND10YR	NSE20
Mean	11.92197	4373.919
Median	11.97200	4539.775
Std. Dev.	2.110392	782.4322
Skewness	-0.351983	-0.382862
Kurtosis	4.803533	2.132103
Jarque-Bera	17.80442	6.363000
Probability	0.000136	0.041523
Observations	114	114
Stock-Bond Correlation		
	BOND10YR	NSE20
BOND10YR	1.000000	-0.146277
NSE20	-0.146277	1.000000

Source: Author Computation

Table 4.1 above show both the variables Kenya Government 10-year Bond and the NSE 20 gave positive monthly mean of 11.92 and 4373.92 respectively. The results are in line with the tradeoff notion risk and return in which the higher yield by stocks as a means to compensate for the instrument’s risk exposure. The high standard deviation intended to measure the volatility and riskiness of the instrument also shows higher standard deviation of the Stocks (NSE20). Compared with stock market, the bond market demonstrates a more leptokurtic curve which conforms to the regular pattern that bond returns generally have smaller volatile than stock returns, which also means that bond market has lower risk than stock market. It also indicates that the Kenya government10yr bond yields are negatively correlated to the NSE20 returns with correlation coefficient of -0.1463.

The general negative relationship is depicted in figure 4.1 below.

Figure 4.1: Stock - Bond Returns



Source Author's Computation

Table 4.2: Descriptive Statistics of Macroeconomic Variables

	<i>INT</i>	<i>INFL</i>	<i>IP_GROWTH_RATE</i>	<i>M3</i>
Mean	8.300526	8.385263	4.661842	1.310778
Median	7.895000	6.630000	4.140278	1.224257
Std. Dev.	3.625153	4.899578	1.344412	1.193193
Skewness	1.248182	1.020051	0.818754	0.380423
Kurtosis	5.991106	2.796468	2.684904	6.186520
Jarque-Bera	72.09811	19.96634	13.20840	50.98078
Probability	0.000000	0.000046	0.001355	0.000000
Observations	114	114	114	114
Correlations				
	<i>INT</i>	<i>INFL</i>	<i>IP GROWTH RATE</i>	<i>M3</i>
<i>INT</i>	1			
<i>INFL</i>	0.4324	1		
<i>IP GROWTH RATE</i>	0.0030	-0.3507	1	
<i>M3</i>	-0.1706	-0.1018	-0.0367	1

Table 4.2 above show the average Inflation rate as 8.38%. The average interest rate stood at 8.30%. Industrial production growth rate averaged at 4.66% while the M3 growth rate averaged at 1.31%.

Unit Root Test

As noted by (Kirui, Wawire, & Onono, 2014), an important concern in data analysis is to determine whether a series is stationary (do not contain a unit root) or not stationary (contains a unit root). Time series data are often assumed to be non-stationary and thus it was necessary to perform a pretest to ensure that all the variables were stationary in order to avoid the problem of spurious regression (Granger, 2001).

Table 4.3: Unit root test for monthly stock -bond returns and the macroeconomic variables

Variables	Level		First difference	
	Constant	Constant & Trend	Constant	Constant & Trend
BOND10YR	-2.4665	-2.5449	-7.6679***	-7.6061***
NSE20	-18272	-1.8159	-8.1127***	-8.0764***
INFL	-2.2474	-2.7007	-5.5564***	-5.5180***
INT	-2.4583	-3.2518*	-4.8346***	-4.8124***
IP growth rate	-2.1891	-1.3463	-0.6847	-1.6274
M3	-11.9042***	-11.8785***	-11.0374***	-10.9801***

Note: *, ** and *** indicates rejection of the null hypothesis at level of confidence 10%, 5% and 1% respectively

Source: Author's computation

The results indicate that the null hypothesis of the presence of unit root cannot be rejected at level in all the variables except for the Money supply month on month growth percentage M3 which shows that at level, the t-statistics is statistically significant at 1% level. At first difference, the null hypothesis can be rejected in the Bond10yr, NSE20, Inflation and interest rates, with the t-statistics statistically significant at 1% level. This indicates that at first difference all series are stationary when tested with trend or without trend. Therefore, the series can be said to be integrated of order 1, $I(1)$. However, for IP growth rate, the null hypothesis of the presence of a unit root can only be rejected on second difference.

Co-Integration Test

Results Co-integration test was carried out to determine whether the independent and dependent variables were having a stationary linear combination in the long run. According to Dora, (2009) the purpose of a cointegration test is to examine whether variables in the system drift apart from each other and are individually stable $I(1)$ in the short run. If these variables are cointegrated, they will be expected to form a stationary relationship in the long run. According to Brooks (2008), if variables with differing orders of integration are combined, their combination will have an order of integration equal to the largest. Since unit root test results indicated that all the variables were integrated of order one, $I(1)$ the order of integration was taken to be one, $I(1)$. (Kirui, Wawire, & Onono, 2014). The BreuschGodfrey LM test with four lags length was performed in order to test null hypothesis of no serial correlation against alternative of serial correlation. The result is presented in the table 4.4.

Table 4.4:Co Integration Test Results

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.052112	Prob. F(4,103)	0.3842
Obs*R-squared	4.396540	Prob. Chi-Square(4)	0.3550

Source: Author's Computation

With an F-statistic of 4.397 and a p-value of 0.355 which was more than 5% significant level, the null hypothesis was accepted and this confirmed that there was no serial correlation of the error term.

Heteroscedasticity test

The white test (Breusch-Pagan test for heteroskedasticity) was applied to the residuals of the model to find out if the variance of the error terms were constant. The null hypothesis of

homoscedasticity of error term while the alternative hypothesis of heteroscedasticity of the error terms was tested and the results are reported in the table 4.5 below:

Table 4.5 Breusch-Pagan test for heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.403739	Prob. F(4,107)	0.8056
Obs*R-squared	1.665285	Prob. Chi-Square(4)	0.7970
Scaled explained SS	3.663773	Prob. Chi-Square(4)	0.4534

Source: Author's Computation

The result showed an F-statistic of 1.665 and a p-value of 0.797 which was more than 5% significant level, the null hypothesis was accepted and this confirmed that there was no heteroskedasticity of the error term.

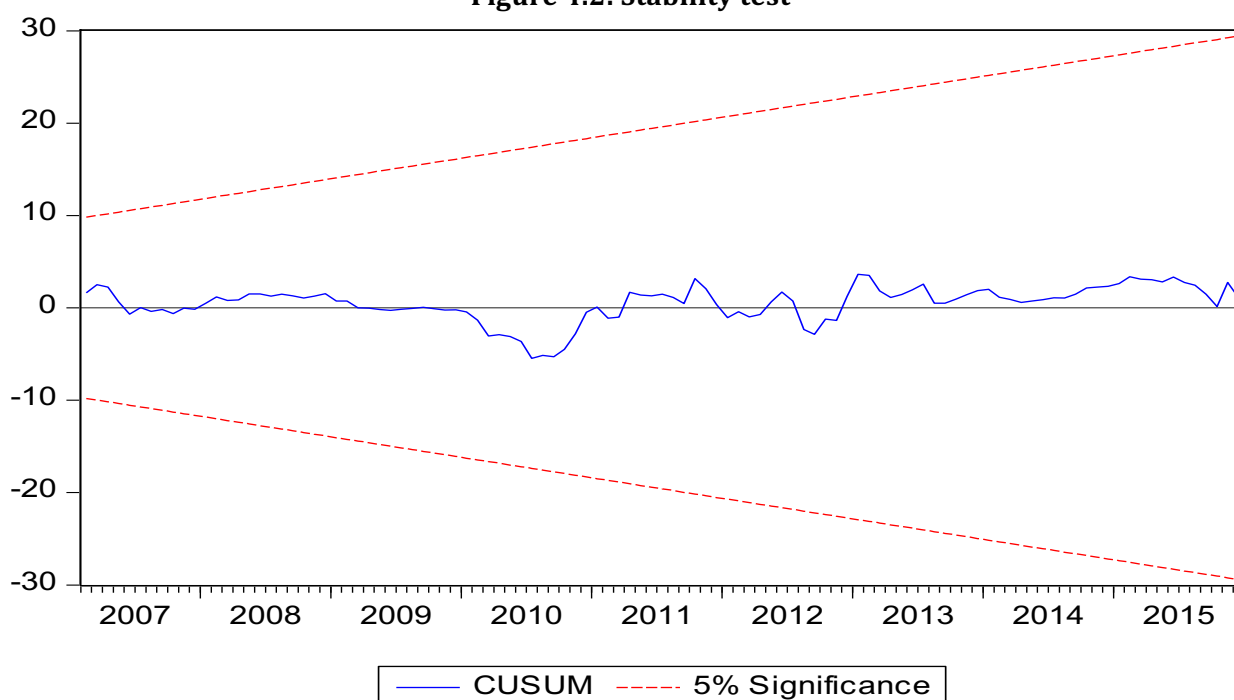
Normality test

Islam and Ahmed (1999) and Takaendesa (2006) observed that normality test was not a most important test after a model has passed the serial correlation and the heteroscedasticity tests. Nevertheless, the Jarque Bera normality test was used in this study to test normality of residuals. The JB test was based on the null that the residual was normally distributed against alternative hypothesis that residual was not normally distributed. The JB result indicates 42.981(0.1012), thus confirming that the residual was normally distributed because P value was more than 5% significant level.

Stability test

The stability of the parameters of the OLS regression long run model was examined using the cumulative sum of the recursive residuals (CUSUM) tests proposed by Brown et al. (1975). The results of the stability tests are shown in Figures 4.2 below.

Figure 4.2: Stability test



The results of Stability test show that the estimated OLS regression long run model was dynamically and structurally stable because the CUSUM statistic stayed within the 5% critical bound.

Results of the entire time sample regressions

Table 4.6 Results of the OLS regression equation

Dependent Variable: D(YCORR)

Method: Least Squares

Sample (adjusted): 2006M09 2015M12

Included observations: 112 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INFL)	0.106088	0.046557	2.278687	0.0247
D(INT)	0.176686	0.036311	4.865951	0.0000
D(IP_GROWTH_RATE,2)	0.029967	0.491377	0.060985	0.9515
M3	-0.060986	0.050560	-1.206213	0.2304
C	0.079123	0.088698	0.892047	0.3744
R-squared	0.236084	Mean dependent var		0.008299
Adjusted R-squared	0.207527	S.D. dependent var		0.699199
S.E. of regression	0.622434	Akaike info criterion		1.933256
Sum squared resid	41.45433	Schwarz criterion		2.054618
F-statistic	8.266952	Durbin-Watson stat		1.803859
Prob(F-statistic)	0.000008			

Source: Author's Computation

Results in table 4.6 indicate Adjusted R² is 21%. This shows that 21% of the variations in the correlations of stock-bond returns are explained by Interest rates, Inflation, Industrial Production growth rate and Money Supply. The F-statistic is significant at all levels implying that the hypothesized relationship between the correlation of stock-bond returns and the selected macroeconomic variables is validated. The value of Durbin-Watson statistic is 1.8 implying that then model is not suffering from autocorrelation problem.

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

Summary

This study summarized the empirical findings as follows. Foremost, unit roots test of the variables was conducted using Augmented Dickey-Fuller (ADF) unit roots test. The ADF test found that all the variables were stationary at first difference except for IP which was non stationary both at I(0) and I(1). The Breusch – Godfrey serial correlation LM test was used to test for co-integration to determine whether the independent and dependent variables were having a stationary linear combination in the long run. The results showed an F-statistic of 4.397 and a p-value of 0.355 which was more than 5% significant level, the null hypothesis was accepted and this confirmed that there was no serial correlation of the error term.

The model was also tested for heteroscedasticity - if the variance of the error terms were constant- this was done using the white test (Breusch-Pagan test). The result showed an Fstatistic of 1.665 and a p-value of 0.797 which was more than 5% significant level, the null hypothesis was accepted and this confirmed that there was no heteroskedasticity of the error term. The model passed both the normality and the stability tests. The study used the ordinary

least squares regression model to estimate the relationship between the dependent and independent variables. The empirical result of the hypothesis tested showed that INFL, INT and IP had a positive influence to the stock bond correlation while M3 changes led to negative relationship between the two primary assets.

Inflation rate and interest rates had a positive relationship with the stock-bond return correlation. My results like the results of (Dimic, Kiviaho, Piljak, & Äijö, 2014) show inflation as one of the long term determinants of stock-bond return correlations. The study also validates the findings by Li(2002) that the major trends in stock-bond correlation were determined primarily by uncertainty about expected inflation. On the impact of uncertainty about expected long-term inflation on stock-bond return correlation, Li (2002) shows that greater concerns about future inflation tend to result in stronger co-movements between stocks and bonds. About expected inflation rate, Li (2002) noted that similar to the real interest rate, expected inflation moves stock and bond returns in the same direction.

Industrial production was found to have a positive influence on stock-bond return correlation in this study. This is consistent with the findings of Dimic et al (2014) who found business cycle to be the third influential macroeconomic factor for the stock-bond correlation in the long run, appearing significant in eight emerging markets under their review. Estimated coefficients of the industrial production index were positive and statistically significant in seven countries. The fourth determinant, money supply was found to have a negative influence to stock –bond return correlation contrary to the findings of Dimic et al (2014) and (Durnez, 2016). This finding therefore validates the assertion that, depending on the effect of money supply on the inflation and real interest rates, the two components that govern the stock-bond covariance: unexpected shocks of the real interest rate will drive returns of stocks and bonds in the same direction, and that expected inflation will increase excess stock returns and lower excess bond returns (Campbell & Ammer, 1993).

Conclusions

This paper investigated how macroeconomic factors affect the correlation between stock and bond returns in Kenya over the past decade (July2006-Dec2015) using the Arbitrage Pricing Theory (APT) and Capital Asset Pricing Model (CAPM) framework for a time series of data. The study aimed to validate that the correlation of stock and bond returns could be explained by their common exposure to macroeconomic factors. The link between the stock-bond correlation and macroeconomic factors was examined using OLS regression model. With the empirical tests aimed at answering the following questions: How does inflation affect the correlation between stock and bond returns in Kenya? How do the interest rates affect the correlation between stock and bond returns in Kenya? How does money supply affect the correlation between stock and bond returns in Kenya? And how does the business cycle affect the correlation between stock and bonds?

Secondary data obtained from the Kenya Central Bank, the Nairobi securities exchange and the Kenya bureau of statistics from July 2006 –December 2015 was analyzed. The empirical results confirmed that inflation rate, interest rate and business cycle do have a significant and positive influence on the stock-bond correlation. Money supply was found to have a negative influence on stock bond correlation in this study. The OLS regression Model confirmed long run relationship between stock-bond correlation and the macroeconomic variables under review. The model was found to be robust because it passed all the diagnostic tests.

Recommendations

For Policy Making: This master's thesis contributes to monetary and fiscal policy formulation processes in emerging markets and more so in Kenya. Policy makers must exercise care when drawing up monetary policy involving interest rates and other economic policy because these policies may affect inflation rates, M3 and IP and in turn affect yield spread between assets. The understanding of how the bonds and stocks work plus the awareness of the stock - bond market could further help to develop the markets in Kenya as lauded in the Kenyan capital markets and securities exchange master plans.

For Further studies: This study contributes to the existing literature in two ways. First, by testing the model on the full time sample, the study provided new evidence to the little existing literature about stockbond return correlation in emerging countries. In addition, this study has provided evidence on the possibility of time-varying relationships in emerging markets like Africa more so in Kenya. For more understanding of the effect of macroeconomic variables on stock-bond correlations, this study proposes that future studies may focus on the following areas: Kenya recently launched the M-Akiba bond, a further study to understand if M-Akiba bond yields are driven by macroeconomic factors and how the correlation between stock-bond has been impacted by the new entry. This study also recommends further research that compares how the macroeconomic factors reviewed herein influence stock-bond correlations across a region like the Sub-Saharan Africa with a wider set of data. Further research in this area could check the influence of political risk on the stock -bond correlation in Kenya. This will allow a review of structural breaks in the 2007/2008, 2013 and the 2017 pre and post-election periods and how investors allocate their assets during these periods.

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On Performative And Constative Constructions

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ABSTRACT

The article deals with the formation of the theory of speech act. It states the opinions of different linguistics about speech act such as J.Austin, C.Searle, etc. The article underlines that the theory of the stated problem in the linguistics is related to the name of J.Austin. The author especially analyzes the essay by J.Austin "How to do things with words". It underlines the division of speech acts such as locutive, illocutive, and perlocutive. The examples used in the article have been explained comprehensively in the article. J.Austin's speech act theory has also been touched upon by the author.

Key words: language, speech act, word, referent, communication, name, performative, constative

INTRODCUTION

All types of relationship have been formed through communication. Penfield W., and Roberts L. writes about communication: "Communication is a type of meanings that we use through language (Penfield., Roberts 1964, p. 28). According to their opinion the communicative side of a language should be investigated as a separate problem.

N.Chomski states that the main aspects of a language must be meant as a part of the communication process. That is why it is written that language cannot be studied outside communication (Chomsky 1966, p. 98). The 20th century philosophy of a language has been centered on the relationship of a language with outside world (Aarsleff 1982, p.119). Dealing with the perception of the outside world in the language P.F.Strawson's dichotomy has been formed. P.F.Strawson writes: "What does it mean that a word, or a sentence has a meaning?" (Strawson 1952). It may be called as a controversial problem among the theorists of the communication and formal semantics. According to formal semantics it is inaccessible to give adequate information about the meaning of the concept without referring to the client's intentional intentions. On the contrary, there is an idea that the semantic system and the syntactic rules that define the meaning of the sentence are not considered to be a system of rules for communication (Strawson 1952, p.26). Later developing his "theory of communication" P.F.Stroson writes: "We associate the meaning with reality and once more with the reality, simply by means of sentences and sentences also belong to the language. But, as a theorist if we do not understand the language of a person, then it means that we do not know anything about the language of a man" (Strawson 1952, p.7).

The other British philosopher H.P.Grice writes about the role of the communication in the speech act: "To keep communication" and "to have a meaning" can be understood as a means of intensions and beliefs by participants in the communication (Grice 1989, p. 260).

DISCUSSION

While communicating true or false questions may be formed. People specially pay attention to the opinions of other people's being true or false. It is considered to be fundamental of thinking and decision-making in the development process of communication in the context of ethical

communication, culture, channels and the media. Besides, ethical communication strengthens the dignity of a person by promoting truth, accuracy, accountability (Grice 1989). Non-ethical communication threatens the quality of all communication and outcomes, as well as the well-being of individuals in the community we live in. P.H.Grice states about the conditions of ethical communication:

- truth, excellence, conscience, reason is taken as a major part of the integration of communication;
- the freedom expression of an opinion, tolerance, sense of responsibility should be considered as the main relationship of civil society;
- should be understood and respected before evaluating other communications and responding to their message;
- complete the communication resources and opportunities are meant to be important to complement the humanistic potential, contribute to their wellbeing of families, and communities;
- it is necessary to follow the principles of justice and impartiality;
- protection of confidentiality and privacy in the distribution of information, ideas, feelings is important (Grice 1989).

Language is a complex object and its investigation is far more complicated than its complexity. F.Y.Veysalli writes: "Language is considered to be spiritual heritage from the history point of view. It is the instrument that he speaks as a language spoken by all language carriers and, it is different from other languages (Vesalli 2011, p.77).

F.Veysalli considers the language to be complex, as well as it is multidisciplinary institution (Vesalli 2011, p. 95). It is related to both individuals, and to the society and in some cases it is considered to be an abstract object. That is why the speaking and the hearing which is considered to be main aspects of language availability have great role in language process. It also means that language considered to be a main means in the communication process. Language acts as a means of communication, according to which language units are perceived, coded, and accepted by human beings. The listener has a leading role in the language communication as well as a speaker (Vesalli 1993, p. 96). F.Veysalli writes that language and mind has an intermutual relationship and from their unity the opening of the soul is observed (Vesalli 1993, p. 9). Language and thinking has a great role in every aspect of the human being, for example, in the enrichment of his/her life, the formation of his/her mind, the changing of his/her thinking, the achievements he/she has gained, and so on. Citing by N.Chomsky language is competence and it is a means of realization of competence (Chomsky 2006, p.73). The means that are used by a language are meant to be technical means by some linguists, and they are divided into two groups: phonetic means and brain means (Saussure 2003, p. 167). The voicing, words, and word forms are considered to be phonetic means. In general, at the initial stage of the project, not morpheme, monophoneme phase must be considered as the initial stage (Chomsky 2006, p. 109). Basing on F.Y.Veysalli three types of languages can be distinguished:

III types of a language. First, the voice must be meant as the next phase of human activity. Studies show that in first-person humans, there may be sounds produced during transplantation after intense work.

II types of a language. The efforts of different sciences (linguistics, zoo-psychology, pediatric psychology, etc.) show that the initial discourse of the people is very simple and is made up of meaningful units, and they are divided into parts of the human language.

I type of a language. This language consists of acoustic images that can be divided into parts. The second and third types are very simple, the first type is more organized and, it is a language that can be divided into both phoneme and morphem (Chomsky 2006, p. 109). Learning the role of the language as a complex object is very complicated as it was yesterday, and it is likely that it will be like this tomorrow too. Learning the inside and outside of the sentences available in the human language, what they mean, for example, if they mean wrong or right manner in the speech, their successful or unsuccessful performance, and if they mean any performance developed the theory of the Speech Act.

The theory of speech act is related to the name of British philosopher J.Austin. It is noteworthy to mention the idea by J.Austin about speech act theory. He writes: "The sentences may also be considered to express promise, threaten, etc. It is not easy to understand what they want to express without being aware of which communicative context they refer to Austin J.L. (Austin 1962, p. 124). J.Austin thinks that the facts that are observed in the language are richer than dictation.

J.Austin investigated many facts related to the essence of the language, as well as he tried to learn the relationship among things and their names. His famous work "How To Do Things with Words" deals with this problem (Austin 1962, p. 106). He developed "simple language philosophy". The philosophers of simple language philosophy do not accept the idea of "language is independent and can not be controlled". J.Austin observed the differences among words and word families used everyday and writes about it: "the words are different from what they are expressing in the communication process, and each of them has its own role in the speech act". The author opposed the meanings of the adverbs. For instance, /involuntarily/ (qərəzliklə), /inadvertently/ (ehtiyatsızlıqla), /by accident/ (təsadüfən), /by mistake/ (səhvən), etc. (Austin 1962, p. 107). The following samples may show the differences in the meanings of these adverbs:

Sample 1:

/Sorry// /I knocked over the vase **by accident**// /Bağışlayın// /Mən vazanı **qəza olaraq** saldım (**təsadüfən, ehtiyatsızlıqla saldım**)// - In this sentence the adverb **/by accident/ (təsadüfən, ehtiyatsızlıqla, qəza olaraq)** is used:

Sample 2:

/I am so sorry, sir// /I gave you the wrong dish **by mistake**// /Bağışlayın, cənab// /Mən səhvən sizə yanlış qab (boşqab) verdim// - In this sentence the adverb **/by mistake/ (səhvən)** is used:

It is possible to observe the environment and individual psycho-emotional state of the speaker, as well as the communication environment in which the conversation takes place and the use of different adverbs, depending on the power of the required word. J.Austin calls these kinds of sentences as "garden-variety" in the speech act. He explained the different meanings of such sentences, events, and situations with the distinctive qualities of words and the management of different movements.

For instance, the performative word /excuse/ (üzr üstəmək) is used in the meaning of /I am sorry for being late//, and the speaker performs the act of apologize (Austin 1962). The meanings of performative verbs differ from the meanings of other verbs.

J.Austin writes about the differences of words, verbs, phrases in speech acts: "

/You have a donkey, so have I, and they gaze in the same field. That day comes when I conceive a dislike for mine. I go to shoot it, draw a bead on it, fire: the brute falls in its track. I inspect the

victim, and find to my horror that it is your donkey. I appear on your doorstep with the remains and say – “I am awfully sorry. I have shot your donkey *by accident* (or *by mistake*)// (Austin 1961, p.185) /Sənin uzunqulağın var, mənim də. Onlar eyni tarlada otlayırlar. Gün gəlir, mənimki mənim xoşuma gəlmir. Mən onu güllə ilə vurmaq istəyirəm və atəş açıram; heyvan yxılır. Mən qurbanı yoxlayıram və qəfildən dəhşətə gəlirəm ki, bu mənim deyil, sənin uzunqulağıdır. Mən təəssüflə sizin qapıya gəlirəm və nə deyirəm?” Mən deyirəm, mən çox təəssüf edirəm və s. Mən sizin uzunqulağı *səhvən* (“by accident” yaxud da “by mistake”) vurdum; və hadisəni ona yəndən izah edirəm və izah vaxtı “by accident”, yoxsa “by mistake” işlətməliyəm” (Austin 1961, p. 99).

As it is seen in the English version of the above written text two adverbs are opposed: *by accident* and *by mistake*. In the Azerbaijan language the translation of the stated adverbs are the same “*səhvən*”, though in English it has different meanings depending on various situation. As it is observed in the example, the adverb *by accident* (*təsadüfən*) is considered more appropriate than the other version. The essence of the investigation of J.Austin is the differences in the meaning of the simple language expressions. The following examples have the same meanings, but they are formed by different parts of speech:

/It looks blue// – (Bu, mavi görünür);

/It looks like blue// – (Bu, mavi kimi görünür);

/It appears blue// – (Bu, mavi görünür) və s. (Austin 1961, p. 24).

These kinds of performatives which are used in speech acts demonstrate conventional grammar of sentences.

J.Austin writes that the performative speech act that he presents has its certain formal qualities: the first person singular, present tense form, active voice, but these qualities do not define a word class. The following may illustrate the stated facts:

/The passengers were informed (were warned) to cross only on the bridge// (Sərnişinlərə ancaq körpüdən keçmək xəbərdar olundu) – This sentence is considered to be a performative one because the word /to inform/ (/to warn/) expresses some information, and they are used as performatives in speech acts. The following sentence is not considered to be performative: /I drink beer// (/Mən çaxır içirəm//) because the word /to drink/ (/içmək/) does not express any declaration, or warning, etc. That is why the word /to drink/ is not a performative word.

CONCLUSION

So, we come to the conclusion that the speech acts are units of speech whose grammatical structure conforms to the laws of the languages. The differences in the sentence meaning and the speech meaning of speech acts have a great role in distinguishing the meanings of speech acts. It states that the communicative types of a sentence is meant for speech. In this case the wish and intention of a speaker is taken into account. The types of a sentence such as declarative sentences, exclamatory sentences, interrogative sentences, informative ones may be distinguished in the speech act as well. A sentence is considered to be a complex unit, and its aspects are defined in the speech act.

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A Theory Of Good Governance Or Good Government

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ABSTRACT

The United Nations' endorsed notion of good government or governance can be analysed in a clear fashion with the concepts of rule of law – rule of law I (legality) and rule of law II (democracy). Principal-agent modelling shows how politicians and the bureaucracy can be restrained by rule of law institutions.

Keywords: rule of law, good governance, radical Islam. Asian authoritarianism

INTRODUCTION

Good governance or good government entails limited government, i.e. a political regime that respects the rule of law.. Moreover, limited government in relation to civil society implies a state that operates under certain key rules (Bradley and Ewing, 2010):

- i) *Legality*: government is exercised by means of laws, enforced ultimately by an independent judiciary;
- ii) *Lex superior*: there is a higher law – the constitution - that guarantees certain rights for the citizens, like e.g. equality under the law, due process of law and *habeas corpus*;
- iii) *Trias politica*: executive, legislative and judicial powers are to be separated;
- iv) *Accountability*: Governments can be held responsible for their actions and non-actions through various established procedures of criticism and complaint, enquiry and removal from office as well as redress;
- v) *Representation*: The people have a SAY somehow in government through representative institutions.

These principles above emerged hundreds of years ago, long before democracy was introduced in many countries at the end of the First World War in Europe and America (Lloyd, 1991; McIlwain, 1958; Neumann, 1986). Today all existing democracies endorse these constitutional principles in the form of constitutional democracies.

Rule of law I, whether combined with any form of democracy – referendum type, parliamentary type, presidential dispensation – or not, as in semi-democratic countries that are one party states, comprises: *Predictability*: Public law when properly implemented makes it possible for people to increase the rationality of behaviour. They know what rules apply, how they read as well as how they are applied consistently. This is very important for the making of strategies over a set of alternatives of action. *Transparency*: Societies operate on the basis of norms prohibiting, obligating or permitting certain actions in specific situations. Rule of law entails that these norms are common knowledge as well as that they are not sidestepped by other implicit or tacit norms, known only to certain actors. *Due Process of Law*: When conflicts occur either between individuals or between persons and the state, then certain procedures are to be followed concerning the prosecution, litigation and sentencing/incarceration. Thus, the police forces and the army are strictly regulated under the supervision of courts with rules about investigations, seizure, detainment and prison sentencing. No one person or agency can

take the law into their own hands. *Fairness*: Rule of law establishes a number of mechanisms that promote not only the legal order, or the law, but also justice, or the right. For ordinary citizens, the principle of complaint and redress is vital, providing them with an avenue to test each and every decision by government, in both high and low politics. Here one may emphasize the existence of the Ombudsman, as the access to fairness for simple people. People have certain minimum rights against the state, meaning that government respects obligations concerning the protection of life and personal integrity. Thus, when there is due process of law – procedural or substantive – one finds e.g. the *habeas corpus* rights (Raz, 2009).

Some 50 per cent of the world cherish rule of law in the strong or thick meaning, i.e. *rule of law I combined with popular democracy – rule of law II*. Its spread is partially linked with the level of human development, which is a function of economic output to a considerable extent. However, countries that implement rule of law II also establish *rule of law I*, i.e. legality and rights. It is the opposite that does not hold, meaning that several countries honour rule of law I but not rule of law II. In countries where neither rule of law I nor rule of law II exists, political agents face almost no restrictions upon what they may wish to do.

THE TWO CONCEPTS OF “RULE OF LAW”

In continental political theory, rule of law tends to be equated with the German conception of a *Rechtsstaat* in its classical interpretation by Kant Reiss, 2005). It signifies government under the laws, i.e. legality, lex superior and judicial autonomy (rule of law I). In Anglo-Saxon political thought, however, rule of law takes on a wider meaning, encompassing in addition also non-judicial institutions such as political representation, separation of powers and accountability (rule of law II). In general, the occurrence of rule of law II is a sufficient condition for the existence of rule of law I. But rule of law I – legality and judicial independence – is only a necessary condition for rule of law II – constitutionalism as voice and accountability.

RI: Legality and Judicial Independence

According to the narrow conception of rule of law, it is merely the principle of legality that matters. Government is in accordance with rule of law when it is conducted by means of law, enforced by independent courts. The law does not need to contain all the institutional paraphernalia of the democratic regime like separation of powers and a bill of rights. The legal order may simply express the authority of the state to engage in legislation, as expounded by legal positivists like e.g. Kelsen (2009) in his pure theory of law. The basic norm implies legislation that in turn entails regulations that implies instructions and commands. However, whatever the nature of the legal order may be, the principle of legality restricts governments and forces it to accept the verdicts of autonomous judges. 2 Countries that lack the narrow conception of rule of law tend to have judges who adjudicate on the basis of short-term political considerations, twisting the letter of the law to please the rulers. Thus, law does not restrain the political agents of the country, employing the principal-agent perspective upon politics (Besley, 2006).

One observes a connection between socio-economic development and judicial autonomy. Poor and medium affluent countries are not characterized by judicial independence. Yet, besides socio-economic development many other factors impinge upon the institutionalisation of judicial independence like inherited legal system, religion and the party system. When judges are not independent they change their verdicts in accordance with the political climate of the country. Whatever protection the constitution or the law offers in writing for citizens or foreigners visiting a country becomes negotiable when a case is handled by the police. Even if a country does not possess a real constitution with protection of a set of inalienable rights, it still makes a huge difference whether the courts constitute an independent arm of government.

Thus, also in countries with semi-democracy or with dictatorship, matters become much worse when judges cannot enforce whatever restrictions are laid down in law upon the political elite. The independence of courts is a heavily institutionalised aspect of a mechanism that takes years to put in place. Judges are paid by the state by means of taxation, but the formula of "He who pays the piper calls the tune" does not hold. In order to secure judicial independence from politics and the rulers an elaborate system of appeal has to be erected, meaning that the behaviour of lower court judges will be checked by higher court judges. The standard institutional solution is the three partite division of the legal system with a supreme court at the apex. However, countries may have one than one hierarchy of courts making the judicial system complex. An independent judiciary secures a fair trial under the laws. From the point of view of politics this is important in order to avoid that accusations for any kind of wrong doing is used for political purposes. When there is an autonomous legal machinery in a country, then also politicians or rulers may be held accountable for their actions or non-actions – under the law. This is of vital importance for restricting corrupt practices of various kinds.

RII: Constitutional Democracy

Legality and judicial independence are not enough to secure rule of law in the broad sense of the term. Broad rule of law involves much more than government under the laws, as it calls for inter alia: separation of powers, elections, representation and decentralisation of some sort. In the WB governance project the broad conception of rule of law is measured by means of the indicator "voice and accountability". Since rule of law II regimes are invariably rule of law I regimes, but not the other way around, countries that score high on voice (of the principal) and accountability (of the agents) can be designated as constitutional states.

There is a positive relationship between socio-economic development and the constitutional state, albeit not as strong as in the classical studies on democracy and affluence (Diamond, 1999). There is a set of countries that deviate from this pattern. On the one hand, a number of countries have reached a high level of socio-economic development without 5 institutionalising the mechanisms of the constitutional state: the Gulf monarchies and the Asian tigers. On the other hand, a set of countries with the constitutional state are to be found at a low level of socio-economic development, mainly India, Botswana and Mauritius. In some Latin American countries there is a medium level of socio-economic development and a medium degree of rule of law institutionalisation. This association between affluence on the one hand and democracy on the other hand has been much researched and various explanations have been adduced about what is cause and what is effect. Here, we note that there are quite a few countries that have reached a rather high level of human development due to economic advances in GDP but they have not established a full rule of law regime, comprising of both rule of law I and rule of law II. Finally, one may enquire into the empirical association between rule of law I and rule of law II. It holds generally that countries that institutionalise the constitutional state also respects judicial independence, but the converse does not hold. Some countries only honour one form of rule of law, namely legality. Numerous countries have neither rule of law I nor rule of law II.

GOOD GOVERNANCE WITH THE WORLD BANK PROJECT

The concept of good governance has no standard definition in the dictionaries. Instead, I will rely upon the approach of the World Bank Project to governance. The World Bank (WB) states: "Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them." (<http://info.worldbank.org/governance/wgi/index.asp>)

The World Bank's Worldwide Governance project, mapping good or bad governance around the globe during the last decade, identifies six dimensions in of the concept introduced in the quotation above.

In the World Bank Governance project, one encounters the following definition of "rule of law":
Rule of Law (RL) =

capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence (Kaufmann, Kraay, and Mastruzzi, 2010: 4).

Rule of law (RL) is explicitly separated from voice and accountability (VA), which is defined as follows in the World Bank project thusly:

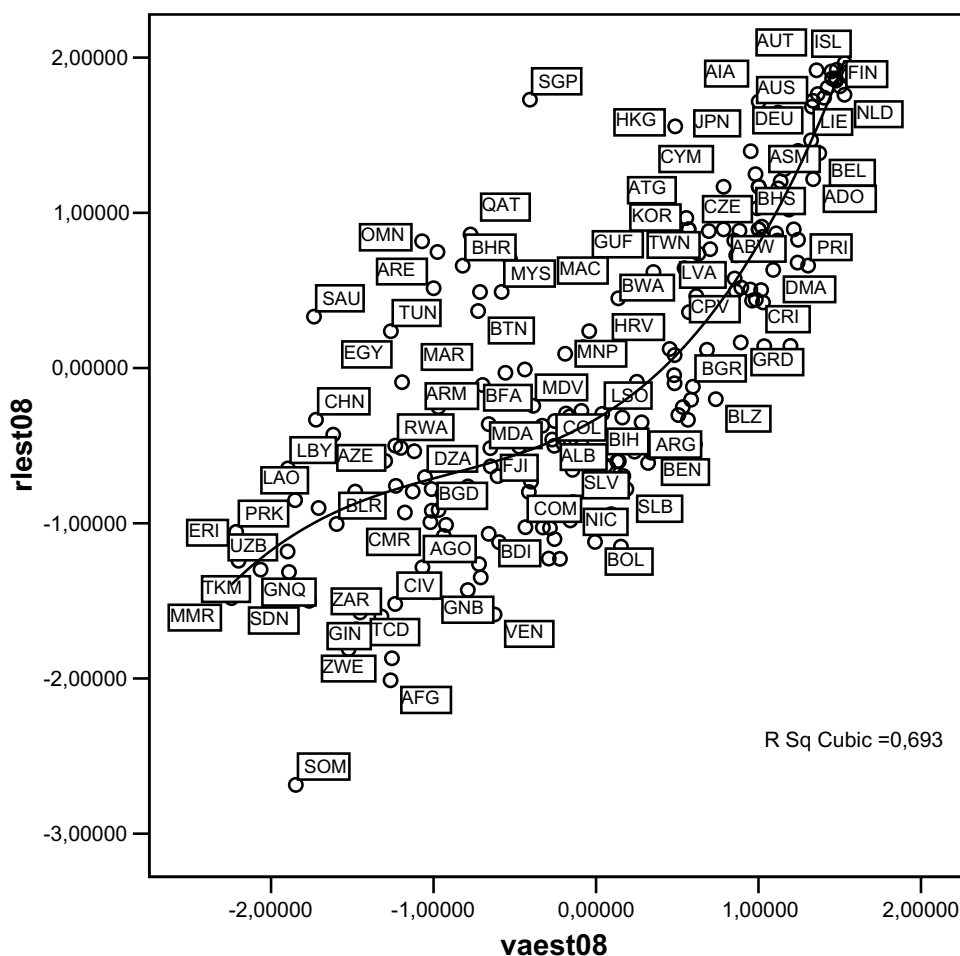
Voice and Accountability (VA) = capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media (Kaufmann, Kraay, and Mastruzzi, 2010: 4).

The WB Governance project suggests four additional dimensions of good governance (political stability, government effectiveness, regulatory quality, and the control of corruption). The World Bank Governance project employs a host of indicators in order to measure the occurrence of rule of law RL around the globe, which results in a scale from -3 to +3.

In a constitutional democracy, there is a combination of both rule of law (RL) and voice and accountability (VA). But rule of law was conceived already in the Ancient and medieval periods, whereas Western type democracy belongs to the 20th century. Thus, I will separate between a narrow concept of role of law (RL), corresponding to the World Bank's terminology, and rule of law in a broad concept, as including voice and accountability (VA). Several countries have or may introduce rule of law I without accepting rule of law II, i.e. party competitive democracy.

Rule of law principles offer mechanisms that restrain behaviour. We distinguish between rule of law in a narrow sense (legality, due process) – *RULE OF LAW I* – and in a broad sense – *RULE OF LAW II* (constitutional democracy). Some countries practice only rule of law I, whereas other countries harbour both mechanisms. A few countries have neither rule of law I or rule of law II, especially failed or rogue states or states in anarchy or anomie. Figure 1 shows the overall global picture with Rule of Law II on the x-axis (voice and accountability) and Rule of Law I on the y-axis (legality and judicial autonomy).

Figure 1. Rule of Law I (rlest08) and Rule of Law II (vaest08)



Source: Governance Matters 2009. Worldwide Governance Indicators 1996-2008: vaest08, rlest08.

One may divide Figure 1 into four boxes with the countries scoring negative on rule of law I and rule of law II in the left bottom box. They are mostly African and Asian countries. A few African and Asian states are to be found in the upper left box, meaning they score zero or medium positive on rule of law I but negative on rule of law II. Why is this global pattern so strong and persistent? For the populations in these African and Asian countries with a lack of rule of law, especially rule of law I (legal integrity and judicial autonomy), it is a dismal predicament, especially when analysed from a principal-agent perspective

PRINCIPAL-AGENT MODELLING

The principal-agent problem in politics and public administration refers to how the people as principal – *demos* - empower the political leaders and their bureaucrats to govern the country. The principal-agent contract consists of promises about what these agents will do as well as what they may expect in remuneration. The mutual understanding between the principal and the agents – political consideration – tend to become institutionalised. Thus, constitutional and administrative law and praxis makes up political consideration.

Rule of law is the regime that offers the best guarantee against political agents dominating the principal, or even worse, exploiting the principal. It is a question of constraining agents, i.e. the principal would want the political agents to be powerful enough to safeguard the state or nation, but he or she would also want to constrain the agents so that abuse of power becomes

less likely, such as embezzlement of public money or torture and sudden disappearances of opponents.

However, one must make a distinction between rule of law on the one hand and democracy on the other hand. Countries that are not likely to endorse Western style democracy may still cherish rule of law. Let us start by mapping the spread of rule of law in Africa and Asia by comparative scores and then interpret the findings in terms of more often used principal-agent framework from advanced game theory.

The principal-agent framework has enjoyed far reaching success in modelling interaction between persons where one works for the other. This interaction is to be found in many settings, such as agriculture, health care, insurance and client-lawyer (Rees, 1985: Laffont and Martimort, 2002). As a matter of fact, the principal-agent problematic is inherent in any employment relationship where one person works for another, who pays this person by means of the value of the output.

Whenever people contract with others about getting something done, there arise the typical principal-agent questions:

- What is the *quid pro quo* between the principal and the agent?
- How can the principal check the agent with regard to their agreement?
- Who benefits the most from the interaction between principal and agent?

These questions concerning principal-agent interacting arise whenever there is a long-term contract between two groups of people, involving the delivery of an output against remuneration as well as a time span between the making of the contract and the ending of the relationship with the delivery of the output. One finds this type of interaction in the client-lawyer relationship in the legal context, in the owner-tenant interaction in sharecropping as well as in the asset holder-broker relation in financial markets.

Agents and *demos*

The agents – politicians and public officials - and the principal – *demos* - are the two key components of political interaction that run through all political systems, whatever their nature may be. The problem of institutionalising the polity originates in this opposition between agents and the principal.

The strength of the principal-agent model is that it bridges rational choice and neo-institutionalism, as its model takes into account three basic elements in interaction, namely rules, incentives and information besides underlining reciprocity. The model is open to the occurrence of opportunistic behaviour, even with guile. When a player has information advantage, then this will be transformed into some form of cash premium. The principal may diminish the information advantage of the agent as specialists by framing the rules of the game such that he/she may have the option of counter-play or replay as well as complaint and judicial redress.

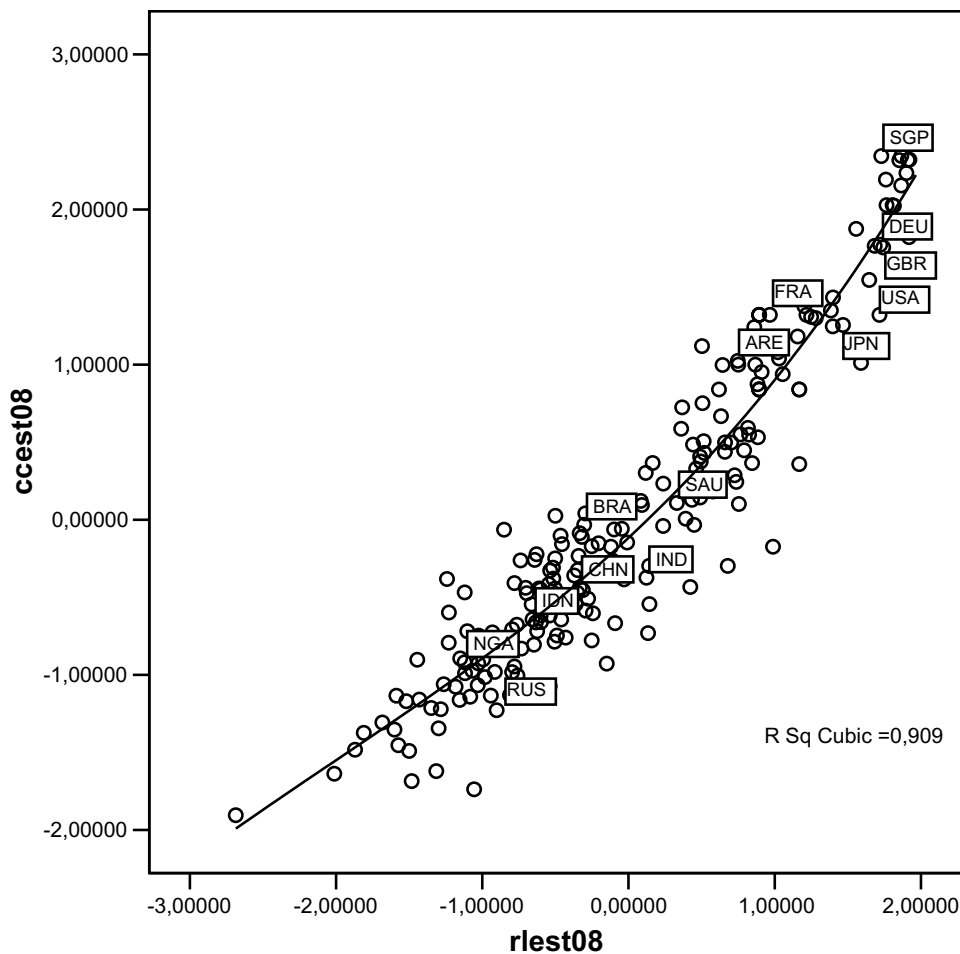
Constitutional government

Constitutional government embodies institutions or rules that constrain those active in domestic or international politics today. Thus, the meaning of “constitution” is a set of principles or rules that constrain rulers, politicians, governments or states. But there can be constitutional government without Western democracy, based upon competitive elections among political parties.

The spread of rule of law II (democracy) seems to be culture bound, as countries with an Islamic (The Koran as constitution) or Buddhist tradition (Asian values) hesitate to adopt fully Western democracy as competitive party government. However, the introduction and enforcement of rule of law I is an entirely different matter. Due process of law is relevant for all states in the world. Where it is lacking, we find arbitrary government, embezzlement of public money and the unpredictable seizure and violent treatment of persons.

Consider Figure 2, constructed with the WB Governance Project data. It links the control of corruption on the y-axis – state transparency – with the rule of law I on the x-axis.

Figure 2. Rule of Law I and Transparency



Source: Governance Matters 2009. Worldwide Governance Indicators 1996-2008: rlest08, ccest08.

Rule of law I can be promoted by institutional policy-making by the political elites in a country. A key institution is the *Ombudsman*, checking the legality of public administration. Rule of law I is highly relevant for the state, also the countries that are non-democracies: military government, charismatic rule, kingdoms, sultanates, failed states, one-party states. It is the best antidote against much long-lived presidents (Burkina Faso, Malawi), arbitrary court rulings (Egypt, China), kleptocracy (Mobutu, Ben Ali), torture (Idi Amin), terrorist attacks (Kenya, Pakistan), civil war (Iraq, Syria), violent civil protests (Bangladesh, Thailand), patronage or favouritism (Saud family, Jacob Suma) and religious judicialisation (Iran, Afghanistan).

WHY RULE OF LAW: WHAT IS THE BASIC RATIONALE?

There is a form of interaction that tends to be long-term between individuals, which involves a *hiatus* between the agreement about what is to be done against remuneration (*ex ante*) and the later in time fulfilment of this contract (*ex post*). This time interval, lasting often more than several months or years, sets up the monitoring problem: Has the agreement been fulfilled in accordance with the considerations when the contract was made? This type of interaction does not take place in the various market forms, but constitutes a problem of analysis in itself (Arrow, 1963). The more this special type of contracting was analysed, between a principal asking for a service or job on the one hand and a set of knowable agents delivering this service or job on a long-term contract, the more often it was found in various important sectors (Ross, 1973; Grossman and Hart, 1983; Sappington, 1991; White, 1992; Ackere, 1993; Althaus, 1997). What came to be known as “*the principal’s problem*” was found in lengthy interactions within legal affairs, psychiatry, stock-market trading and agricultural production (*sharecropping*).

Two basic aspects of long-term contracting are transaction costs and asymmetric information, which never entered in the standard assumptions of the neo-classical decision model in mainstream economics. Since the agent(s) is supposed to have much more knowledge about the service or job to be done, the principal needs to diminish this advantage, but without running up too heavy transaction costs, through costly monitoring or litigation. The agent(s) wants remuneration, which has to come from the value of the service or job delivered. Thus, there is both cooperation and conflict.

The theory of transaction costs stimulated this way of looking at long-term contracting (Rao, 2002). It was also furthered by insights into the nature of institutions, where rules could be employed to prop up the position of the principal (Furubotn and Richter, 2005; Weingast, 1989; Persson and Tabellini, 2003). Now, rule of law is nothing less than the regime that hands down institutions that counter-act agent opportunism, bolstering the principal.

Opportunism of Politicians and Bureaucrats

Political agents are no different from any other human beings. They are driven by the same mixture of egoism and altruism as the average person. Sometimes political agents may be completely obsessed by protecting their own self-interests, as with cruel personalities like Genghis-Khan, Tamerlane, Hitler and Stalin. Sometimes political agents display great generosity and forgiveness towards their opponents, like Gandhi and Mandela. But on average political agents – politicians and public officials – would be self-seeking, often with guile – the opportunism assumption.

The implications of assuming opportunism on the part of agents are strengthened in terms of importance when one adds the basic fact about long-term interaction of the principal-agent type, namely asymmetric information. It is the agent who delivers the output who knows the most about all things relevant to the interaction. And the agent will use this information advantage to capture a rent, or a set of benefits.

Strategy is a pervasive trait of human interaction, both in the micro setting and in the macro setting. Taking strategic considerations into account goes well in hand with opportunism and asymmetric information. The same applies to tactics. What, then, is the basic issue of contention in the principal-agent interaction? Answer: the division of advantages, given a certain size of the mutual gains to be had.

The state helps the population produce an output, a set of goods and services, to be denoted here with “V”, meaning value. By providing peace and stability, the population may engage in

productive labour, resulting in an output of increasing value year after year. The political agents will claim a part of this value V for their contributions. It is the principal who ultimately has to pay the agents out of the total value V in society.

The agreement about what the agents are to contribute with as well as what they are to be paid may be only a tacit one. It may not even be a voluntary one, as the political agents may force the principal to accept an agreement by the employment of force.

Two things are of great concern to the principal:

1. The maximisation of V : If the political agents act in such a manner as to reduce V , then this is not in the interest of the principal.
2. Reasonable agent remuneration R : If the agents manage to capture a considerable portion of V for themselves, then that would be counterproductive to the principal.

It follows from these two principles that principals would be very unhappy with a situation where their political agents contribute to a low output V , while at the same time providing them with a considerable share of V by maximising R .

What is included in the output V ? One may confine V to the set of public or semi-public goods. The country contracts with a set of agents in order to protect V , but the country must remunerate the agents (R) from V . How can the country select and monitor its agents so that V is maximised, given the constraint that the set of agents must be compensated for their effort R , from V ? One may offer a most comprehensive definition of R , denoting both tangible assets and intangible ones? R includes all things that are valuable: goods, premises, services, assets, perks, prestige, esteem, etc.

The interaction between political leaders and the population is omnipresent. Whatever the leaders are called and whichever rules apply for their behaviour, human societies have not been leaderless. Even among groups with a highly egalitarian culture, political leaders somehow emerge. This sets up the principal-agent problematic inherent in the state.

When two people or sets of people interact, they may arrive at a mutual understanding of the terms of interaction. These expectations may be enshrined in a contract, written or verbal. Yet, even when the expectations governing the interaction between the political agents and the principal are not codified somehow, there is still consideration.

Consideration is at the core of human exchange and contracting: Something of value is given for getting something from another person. Consideration is the inducement, price or motive that causes a party to enter into an agreement or contract. In politics, the leaders receive ample consideration for governing the country. They take a part of total value V for their needs. And they are expected to deliver services to the political club, first and foremost maintain the peace, deliver public goods and enhance the GDP.

Since the consideration must be some benefit to the party by whom the promise is made, or to a third person at his instance, or some detriment sustained at the instance of the party promising by the party in whose favour the promise is made, politics is replete with consideration. The agents of the state employ a variety of techniques to raise value to themselves as consideration for their governance activities.

Political Monopoly

The external costs to the state may be very high, if there is political monopoly. What the principal would not want to have, all other things equal, is a situation where the political agents not only take a huge remuneration R for their work but also accomplish mediocre or straightforward disastrous outcomes, reducing the value of society V . In the principal-agent literature, excessive remuneration on the part of the agent is referred to as “rent-seeking”, whereas the failure of the agents to deliver on what they have promised is called “dissonant” actions. The important point here is that political agents may disappoint their principal on two grounds: (1) Dissipation of value V , meaning underperformance as measured by outcomes; (2) Looting, i.e. engaging in excessive remuneration R .

A virtue of the principal-agent perspective is that it alerts people to the possibility of large-scale looting in politics and public administration. The worst case scenario for the principal is the combination of bad outcomes in politics and excessive remuneration for agents responsible for the results. This happens often when there is looting.

“Looting” refers to any form of taking of value that amounts to an un-proportional compensation in relation to the effort exerted. It may be illegal, as when soldiers go on a rampage. But political looting is often more refined than populist looting when law and order breaks down. The appropriation of the resources of the administrative apparatus (“slack”) is a typical form of political looting, much emphasized by Weber for his comparative institutional analyses (Weber, 1978). The concept of political looting is broader than the notion of corruption or embezzlement, which are strictly illegal phenomena.

Looting may occur with or without value dissipation. Political agents may successfully claim a huge portion of the value in society without at the same time reducing the total size of value. In many Third World countries, political looting goes hand in hand with value dissipation though. An extreme case is that of present day Zimbabwe, which country according to its president “is mine”.

Sophisticated forms of looting may occur in constitutional democracy, as when the executive allows itself to be surrounded by vast staff of advisors, experts and the like. Or political agents in the legislature manage to provide themselves with excessive budgets and perks. The fact that corruption allegation is an almost constant theme in public debate indicates how sensitive the principal is to the risk of looting. One form of political looting is of course nepotism or favouritism with regard to family members or cliques of friends when conducted by a president or premier for instance. Petty forms of looting involve negligence about the line of separation between private and public expenditures.

The rule of law regime is highly aware of the risk of looting, offering restraining rules about taxation, budgeting and financial accountability. It also aims at counteracting the dissipation of social value through representation, election and re-election. The dissipation of value is a problem of aggregation in society (*size of the cake*), whereas the risk of political looting presents a distributional problem (*who gets what*).

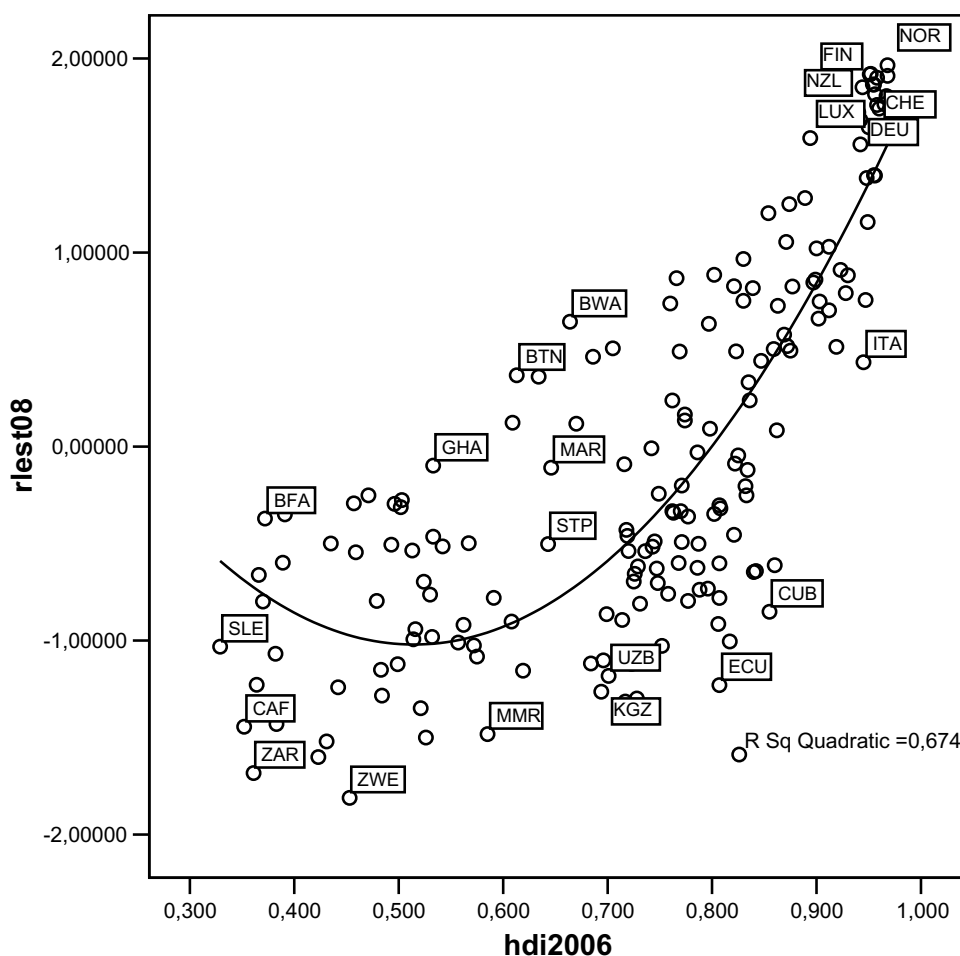
Value Dissipation

The constant focus of policy-makers upon economic growth shows how aware the principal is today about the risk of value dissipation. The population worries not only about various forms of looting but also about the risk of unfortunate or disastrous policy-making that reduce aggregate income or wealth. A set of political agents may be extremely costly to the country because they are incompetent although honest. Political consideration as defining the *quid pro*

quo relation underneath political leadership would comprise some mechanism for replacing one set of agents with another, especially in a rule of law regime.

There is the possibility of a dramatic effect from the combination of looting and dissipation of value, like for instance as matters now stand in countries like Myanmar, Zimbabwe and North Korea. One should not, however, assume that the risk of value dissipation is unique to Third World countries. On the contrary, value dissipation occurs also in First World countries, where the 2003 American led invasion of Iraq offers a telling example, resulting in so huge costs – human and economic - and so little. And even a country like the UK with its rule of law tradition does not appear to be immune from various looting strategies on the part of parliamentarians, definitely immoral but not always illegal. Consider Figure 3 depicting the relationship between rule of law I and the level of human development.

Figure 3. Human Development Index 2008 and Rule of Law I



Sources: Governance Matters 2009. Worldwide Governance Indicators 1996-2008: RLEST 2008; UNDP (2008): HDI 2006.

The theory of good governance entails that a government adhering to rule of law precepts will tend to be more successful in enhancing socio-economic development than a government that fails to respect them. Thus, economic activity will be stimulated by legal predictability, the protection of property, and the autonomy of judges when testing cases for assumed violations of law (Cooter and Ulen, 2010).

Constraining politics and administration

Rule of law institutions constrain the political agents – politicians at various levels of governments, political parties, rulers, bureaucrats, agencies, etc. – to the advantage of the *demos*, i.e. the population in a country. Only rule of law institutions can restrain political agents from engaging in opportunistic behaviour, like e.g. corruption, favouritism, embezzlement or patronage.

Within a country normally the constitution outlines a set of constraints upon the political agents, when it is enforced. Internationally, states accept to participate in regional and international organisations that also may restrain the political agents. The process of globalisation has reinforced the regional and international bodies, constraining more and more the states of the world.

One may view the structure of political agents as a nexus of principal-agent relationships. Thus, groups choose their political parties, who when elected to the national assembly in turn select government officials. The population as the principal may wish to have a set of different types of agents, confronting and controlling each other – separation of powers. Competition among agents in elections is one mechanism for restraining political agents, counter-veiling agents like judges constituting another mechanism.

The principal would, one may imagine, support the recruiting of agents in the regional and international bodies, as they offer further restrictions upon the governments of states. Public international law offers some important protections for the country population against abuse of power by their own governments.

The idea of a principal-agent relationship is simple when one person hires another to do work for him against compensation in a contract with a long-term duration – consideration. Typical of political institutionalisation is that there are several principal-agent relationships and they are not all of the same kind.

First, one may distinguish between executive, legislative and judicial agents – the classical doctrine of *trias politica* in constitutionalism. The interaction between executive and legislative agents may be structured alternatively, like in parliamentarism or presidentialism. What is crucial with the judiciary, whether structured as in the Common Law tradition or as in the Civil Law tradition, is the political independence of the judges from the executive and legislative agents.

Second, a state may be organised on a territorial basis with communes, regions and the national government under alternative institutional arrangements. With federalism, there is a complete replica of the *trias politica* at each level in the complex system, each province being organised as a state. In a unitary state, the nation-state prevails over the regional and local governments in a single dispensation.

The principal of the state – the citizenry or population – club may fear two kinds of external costs, namely the costs imposed by intruders from outside or troublemakers from inside on the one hand, as well as the costs stemming from the actions of the political agents. The principal would be willing to empower the political club in order to reduce the first type of cost. But strengthening the political club leads to the risk that the political agents become so powerful that they abuse the strength of the state for their aggrandizement.

The domination of the agents over the principal may take many forms in politics. Most of them involve political monopoly, meaning that a subset of agents eliminate all other contending agents. Political monopoly may take a few institutional expressions: a) Hereditary monarchy; b) Gerontocracy, c) Aristocracy, d) Racial or ethnic domination; and e) the one-party state.

Political monopoly allows the agents to engage in looting, meaning that the agents take a huge part of the total value V in society for covering their own needs. Looting is an agent strategy that may take different forms. One may point at the revenue system of the Mughal emperors in India, which degenerated slowly into oppressive forms, impoverishing the population, as different agents one after the other squeezed out their "bonuses" from the peasants' V (Keay, 2001). Looting as e.g. tax farming or sharecropping definitely leads to the dissipation of value also in Imperial China (Keay, 2008) and in the later Ottoman Empire (Darling, 1996; Inalcik et al, 1997).

A third form of agent domination is when agents ravage the country, rendering havoc and promoting anarchy. In civil war and anomie, opposing subsets of agents fight each other, while making the life of ordinary people miserable and often short. Civil war entails that the political club no longer exists, or operates in accordance with the original political consideration. It is a marginal case of agent domination, but it is not infrequent.

The mechanism of political monopoly involves exclusion, perpetuation and concentration. Thus, only one subset of agents is tolerated. This subset attempts to prolong its grip on power using various strategies. Finally, advantages – economic or other - are concentrated in this subset of agents.

THIN OR THICK CONSTITUTIONALISM

A constitutional state affords two kinds of mechanisms that enhance stability in political decision-making, one creating so-called immunities or rights that cannot be changed and the other introducing inertia in the decision-making processes. Immunities and so-called veto players would reduce the consequences of cycling, strategic voting and log-rolling. The critical question in relation to the constitutional state is not whether immunities and veto players per se are acceptable, but how much of these two entities are recommendable? Given the extent to which a state entrenches immunities and veto players, one may distinguish between *thin constitutionalism versus thick constitutionalism*. In a strong constitutional state there would be several immunities, surrounding in particular private property. In addition, there would be a constitution institutionalized as a Lex Superior, which would be difficult to change and which would be protected by strong judicial review either by a supreme court or a special constitutional court. Would not such a strong constitutional state set up too many barriers for political decision-making? In a thin constitutional state, there would be less of immunities and not much of constitutional inertia in combination with only weak judicial review. Such a weak constitutional state would safeguard the classical negative liberties by designating them freedom of thought, religion and association with the possible exception of private property, which would only be regulated by ordinary statute law. There would be constitutional inertia, but not in the form of qualified majority rules and the legal control of public administration would be important but judicial review would not take the form of a power of a court to invalidate legislation. The problem with a thick constitutional state is that it may bolster the status quo to such an extent that democracy is hurt. These mechanisms that thick constitutionalism involve - immunities, qualified majorities, judicial review - all come into conflict with desirable properties identified above in relation to the making of social decisions: neutrality, anonymity and monotonicity or positive responsiveness. Ultimately, strong constitutionalism runs into conflict with the egalitarian stand in the concept of democracy,

viz that any alternative should be relevant for social decision, that each and every person should have the same say. A thick constitutional state may enhance political stability but be difficult to bring into agreement with the notion of populist democracy (Tsebelis, 2002). There would simply be too many immunities and too much of inertia for democracy to be able to allow the people to rule. However, it is difficult to see how a thin constitutional state could present a threat to democratic institutions. On the contrary, the institutions of a thin constitutional state could complement the institutions of a democratic state by making social decisions more stable. A constitutional state may be erected by means of a minimum set of institutions or a maximum set. In the minimum set up there would have to be institutions that safeguard the following: (1) legality; (2) representation; (3) separation of powers; (4) control of the use of public competencies and the possibility of remedies. It is difficult to understand that such a minimum set of institutions would threaten democracy. When there is a maximum set of institutions in a constitutional state involving numerous checks and balances, then there is a potential collision no doubt.

Institutional set-ups

One of the key issues in neo-institutionalist research is the comparison between two basic executive models: parliamentarism with the Premier and presidentialism with the President. Which executive model is to be preferred or performs the best? Examining data on the advantages or disadvantages of alternative structuring of the executive, one is confronted by the problematic of the presidential regime. It comes in several forms: pure presidentialism, mixed presidentialism and formal presidentialism. In the empirical enquiry below, pure and mixed presidentialism is displayed against rule of law I and rule of law II, with the following scoring: 0= parliamentarism, 1 = mixed presidentialism, and 2 = pure presidentialism. Formal presidentialism as in some parliamentary regimes or as in the Communist dictatorships will not be included in this enquiry. Also in this somewhat different classification of executives, one receives the finding that pure and strong presidentialism tends to be a negative for rule of law I or II.

Election Techniques: I would be inclined to argue that multi-partism is better than two-partism from the standpoint of principal-agent theory, but it is not easy to prove. In general, having several agents working in the interests of the principal is a conclusion from this theory. However, in a two-party system changes in government tend to be more clearcut and effective than in a multi-party system. The danger with a two-party system is that it develops into a one-party system in disguise. And the main disadvantage of the multipartism is the risk of complete fragmentation of the electorate with more than 10 parties getting seats in the national assembly, creating problems to form a stable government. The distinction between two-partism and multi-partism is closely connected with electoral institutions, although not in a perfect manner. The effective number of parties is lower with majoritarian election formulas (e.g. plurality, run-offs and alternative vote) than with PR schemes (e.g. D'Hondt, St Lague, STV).

It seems that the excellent performance of the institutions of the Washington model is more of an American exception than the general rule. Presidentialism and a majoritarian election formula tend to be negatively related to both kinds of rule of law (I and II). How, then, about a federal dispensation for government? State Format Federalism in a narrow sense is an institutional theory about the structure of any state, democratic or authoritarian. Thus, India and Switzerland are federal but so are the United Arab Emirates and Pakistan. Federalism in a broad meaning is an institutional theory about constitutional democracy, claiming that the federal dispensation works better than a unitary for all constitutional democracies. It is easy to mix up federalism I with federalism II above. Here we only deal with federalism I. Does a mere

federal dispensation enhance the probability of rule of law? In a federal state format the provinces would ideally constitute states with a constitutional framework, they are represented in a federal chamber in the capital and they engage in legislation supervised nationally by a constitutional court or supreme court. Why would such a dispensation promote rule of law better than the simple unitary state format?

Federalism scores better than unitary states on both judicial independence (rule of law I) and democratic constitutionalism (rule of law II). But they also show that this is mainly due to the low number of federal state and the high number of unitary states. Empirically, federalism has only a weak relationship to judicial independence or constitutional democracy. This comes as no surprise as several unitary countries are deeply committed to the autonomy of judges. The next piece of evidence concerning federalism and rule of law shows the lack of a strong relationship between this state format and constitutionalism. Again, this was to be expected, given that federalism is defined narrowly as a mere state format that is just a self-designation by the country in question (Kavalski, and Zolkos, 2008).

Legal Review: The legal system in some countries offers the ordinary courts or a special constitutional court has the privilege of testing the constitutionality of the laws of the legislative assembly or the acts of the executive. This form of political judicialisation – judicial review - is to be found in all countries that emulated the American constitutional tradition (supreme court) as well as in European or Asian 18 countries that adopted the Kelsen model of a constitutional guardian (constitutional court). Although legal review when exercised properly tends to result in spectacular decisions with great political relevance, one may still ask whether legal review matters generally speaking. Countries may endorse judicial review in its written constitution but fail miserably to employment it in the real constitution. Again, the lack of any clear association between legal review and rule of law I or rule of law II respectively is not difficult to explain. On the one hand, also several countries that have institutionalised a profound respect for judicial independence and the constitutional state reject the relevance of legal review. This is most explicit in countries adhering to the Westminster legacy, in which judges apply the law but do not make it. On the other hand, some countries that adhere to legal review in their constitutional documents have a shaky record in achieving the institutionalisation of either judicial independence or the constitutional state in general. Thin constitutionalism may actually perform better than strong constitutionalism, especially when combined with the Ombudsman institution.

Ombudsman

In thin constitutionalism, there is less emphasis upon veto players like for instance the Supreme Court or the Constitutional Court. In stead, thin constitutionalism attempts to combine political flexibility with judicial independence and constitutionalism. Typical of thin constitutionalism is the strong position of the Ombudsman, as the legal guarantor of the national assembly.

PRINCIPAL – AGENT INTERACTION

The principal-agent model is especially valuable when understanding interaction that takes some time to evolve from *ex ante* to *ex post*, involving moves and countermoves on the part of both parties. Politicians and bureaucrats *versus* the population (*demos*) is an example of such interaction that has a longer time span, as the principal will evaluate whether the agents perform well or not at distinct points in time

When governance is modelled as a principal-agent game, then it is not merely a matter of the interaction between two or more persons. The agent(s) is hired to accomplish an output or

outcome, to be paid for his/her effort to do so. Here we have the two key foci in a principal-agent evaluation of governance: (1) the achievements or V – good or bad performance; (2) the remuneration or R – high or low.

In the literature, these two aspects – performance and remuneration – are not always kept separate. Thus, one speaks of bad performances when there is only high remuneration like in “corruption” or “rent-seeking”. Moreover, bad performance is sometimes equated merely with a failure to live up to promises made. The principal-agent framework is applicable to governance and public administration even when there is no form of embezzlement by the agents, but merely renegeing on lofty promises.

A state that runs according to rule of law would satisfy a few conditions that constrain the exercise of political power (Vile, 1967; Tierney, 1982). Rule of law entails that power is exercised according to the following precepts concerning due legal process and judicial accountability:

- 1) (1.) Legality (*nullum crimen sine lege*);
- 2) (2.) Constitutionality (*lex superior*);
- 3) (3.) Rights and duties: negative human rights (*habeas corpus*);
- 4) (4.) Judicial independence: complaint, appeal, compensation.

From the rule of law perspective, two unresolved questions are central in political agency, whatever the political regime may be:

- (1) What is the proper remuneration of the agents, both salary and perks - R ?
- (2) Do agents really deliver, i.e. how can agent performance be evaluated systematically in terms of outcome data - V ?

The remuneration of political agents, whether in legal or illegal forms, has not been much researched, not even in democracies where information is in principle available. For countries where the state controls such information not much is known, for instance about China or the Gulf monarchies. And political agents may destroy much value V in society - see Meredith on Africa (1997).

ENTRY AND EXIT IN POLITICS

Membership in a political club is vital to people, as the status of citizen or permanent resident brings many advantages. When countries lack a political club, supplying public or semi-public goods and services, it is in a state of anarchy: where the life of man is solitary, poor, nasty, brutish and short. Political clubs always involves a principal-agent problematic: population against leaders. Two central aspects of this interaction between political elites and ordinary people are the remuneration R of the leaders for their service to the club as well as the value V of the output of the leaders to society. Politics is about the entry to and exit from leadership positions as well as the relation between R and V .

One interpretation of the concept of homo politicus (*zoon politicon*) with Aristotle is that human beings evolve political organisation in the course of the evolution of civilisation. Political organisation comes in different forms of types of clubs of members and leaders: city-states, empires, oriental despotism, and feudal structure of authority, republics, monarchies, democracies and the authoritarian or totalitarian state. The common core of all forms of political systems is the relationships between leaders on the hand and followers – the members on the other hand (Weber, 1978). From a legal point of view, political clubs may constitute states, but political sociology would speak about political communities, or nations. A neutral term is “government”.

Given that government or the state can be modelled as a political club, government or the state is a collective endeavour by its club members. Political clubs can be small like islands states in the Pacific or Caribbean, and they can include a million or more of people, like India and China. Political clubs are defined by their membership rules that organise persons to participate in the pursuit of collective goals. Persons do not need government for their own individual objectives that they can pursue in markets. Collective goals are lumpy goods and services that require human collaboration to secure on a large scale: infrastructure, education and health care, defence and crime. To allocate these bulky things, the political club amasses resources. Thus, the following question of governance arises: Who is going to decide over the employment of these collective resources? Political club have members as well as leaders.

The entry and exist problematic has been meticulously analysed only in relation to ne social system, namely the market. In the theory of monopoly and anti-trust regulation, great emphasis is placed upon the conditions of entry and exit, as openness of the market to all potential contenders is considered essential to market efficiency, a version of this theme is the "creative destruction" theory of Schumpeter. For losers in market games, there seems to be little comfort except bankruptcy protection? How about the losers in political competition? If the only alternative in exit is personal defeat as bankruptcy, then maybe they will do anything to stay on, once they gained the entry into the political game?

Clubs

According to Rasmusen (2006), the principal-agent model includes a principal searching to maximise the value V of some output(s) by means of contracting with a set of agents, remunerating them, R for their efforts in producing the output. The payments of the agents derive from the value of the output of the agents, meaning that the principal-agent contract must involve considerations covering the *ex ante* to the *ex post* stages.

Political clubs are powerful in proportion to the resources they can muster and control. When they are capable of taking action, the entry to leadership of the club becomes attractive. Clubs are stable when the actions and decisions of its leadership are accepted and obeyed by the members. When the likelihood of obeying is considerably reduced, the club risks disintegration or disappearance.

Leadership in political clubs are sought after, because of two things basically:

- R = remuneration from work done for the club;
- V = influence directly over the value of the output that the club produces as well as indirectly over the entire economy (GDP).

Although this distinction has often been confused, a major institutional development of political clubs is the separation of R from V , making appropriation of public assets impossible, or at least more difficult.

Both R and V are highly important to political elites, as R may give them a decent standard of living, whereas control over parts of V presents them with opportunities for rewarding the people who work for them or support them, i.e. the followers of the leaders.

The principal-agent framework has enjoyed far reaching success in modelling interaction between persons where one works for the other. This interaction is to be found in many settings, such as agriculture, health care, insurance and client-lawyer (Ross, 1973; Rees, 1985; Laffont and Martimort, 2002). As a matter of fact, the principal-agent problematic is inherent in any employment relationship where one person works for another, who pays this person by

means of the value of the output. Whenever people contract with others about getting something done, there arise the typical principal-agent questions:

- 1) What is the quid pro quo between the principal and the agent?
- 2) How can the principal check the agent with regard to their agreement – the monitoring problem?
- 3) Who benefits the most from the interaction between principal and agent – who takes the surplus?

These questions concerning principal-agent interacting arise whenever there is a long-term contract between two groups of people, involving the delivery of an output against remuneration as well as a time span between the making of the contract and the ending of the relationship with the delivery of the output. One finds this type of interaction in the client-lawyer relationship in the legal context, in the owner-tenant interaction in sharecropping as well as in the asset holder-broker relation in financial markets.

In politics, transaction costs are minimised by handing over the responsibility for the tasks of the political club to a set of people, called the leaders, or “agents”. The agents provide the members of the political club – the principal – with the chief goods and services of this type of community, when they are successful that is.

The agents and the principal are the two key components of political interaction that run through all political systems, whatever their nature may be. The problem of institutionalising the polity originates in this opposition between agents and the principal while taking transaction costs into account (Barro, 1973; Ferejohn, 1986; Weingast, 1989; Rao, 2002; Besley 2006; Helland and Sørensen, 2009).

When governance is modelled as a principal-agent game, then it is not merely a matter of the interaction between two or more persons. The agent(s) is hired to accomplish an output or outcome, to be paid for his/her effort to do so. Here we have the two key foci in a principal-agent evaluation of governance: (1) the achievements or V – good or bad performance in producing outputs; (2) the remuneration R of the agents or leaders – high or low.

The output of goods and services is the value that governments bring to the affluence of the country, its GDP. It may consist of allocative programs or re-distributive ones. It can be positive, as when government succeeds in harbouring a period of economic growth and a mixture of public services. But it can also be negative, for instance when leaders use part of the country resources to remunerate themselves. Political leaders want access to both R and V . Thus, entry to the leadership of the political club is a necessity.

Entry

Entry can be open or closed. Openness of political entry as against closed leadership access is a most determining aspect of a political club in the sense that it is linked with many characteristics of a political club. What counts is de facto open entry, but de jure openness is not merely legal formalism. Constitutional regulation of entry is often a first step towards real openness, but it may also be a façade.

Closed Entry

Many kinds of restrictions upon open entry into the leadership of a political club are conceivable. In traditional societies, the ascriptive criteria of ethnicity and religion constitute barriers, while in modern societies political party adherence tends to be the major stumbling block, as in authoritarian and totalitarian clubs. In democratic clubs, there is firstly formal

openness of entry and secondly real openness, to some extent. Finally, we have the clubs of warriors who try to take over leadership if a club. They are characterised by tight relations between leaders, i.e. maximum closeness in often charismatic bounds to one of the leaders.

Thus, openness of political entry is a most important feature of a political club. By means of open entry, old leaders may be challenged by new ones, having a different idea about the objectives of the political club. It is also the means with which new elite may secure its financial basis, providing them with R. One may distinguish between different types of political clubs on the basis of the openness of political entry:

- Closed political clubs: clans, tribes, kingdoms, sultanates, juntas, one-party states, hierocracies;
- Open political clubs: constitutional monarchies, republics, democracies.

Biological heritage or lineage constitutes a powerful mechanism for recruitment in closed political clubs. Closing the political club to the family or the wider clan is a tool to control R and V. Interestingly, one form of entry in Islam was adherence to the family of the prophet, i.e. the clan Quraysh, but it was overrun by oriental despotism, meaning a family dynasty for the ruler who happens to be in power.

The closure of political entry always involves violence, or the threat thereof. Political violence is the use of violence against persons for political reasons, i.e. relating to the goals and means of the political club. In a closed political club, political violence may be employed to back up the sitting leaders. Or it may be resorted to by revolutionary new elite, attempting to crush the established one.

In order to uphold dominance in a closed political club, leaders are willing to engage in all forms of political violence, from stabbing contenders, even children in their entourage – “palace politics” – to large scale military manoeuvres, like for instance genocide towards minorities perceived as threats.

Political clubs operating with closed entry are fundamentally instable. The only exception to this generalisation is the set of Gulf monarchies, where tradition, religion, wealth and naked power combine to buttress the ruling elite, although infighting has not been absent, including assassinations.

Closed political clubs in the form of military juntas or one-party regimes display few restrictions upon the use of political violence to control entry, from faked legal proceedings to underground hidden operation, outside the law. In addition to external opposition, closed political clubs face the possibility of secret internal factions, plotting against the ruling elite. Or such perceived, imagined or constructed threats may be employed for ruthless repression inside the ranks of club leadership.

Closed entry provokes resistance from excluded groups, which sometimes may be handled through co-optation on a limit scale. When political violence occurs, it may remove one elite only to be replaced by other elite. Or rebellion may replace closed entry with openness of entry.

Revolutions, especially the great ones, constitute reactions to closed entry. They may result in more of openness of entry, like the American or French revolutions for a time, or they may end in closed entry again, like the Russian and Chinese revolutions. The closed club of Lenin is especially calamitous, as it preserved the tsarist characteristics of the country, to some extent

even up to today. The second American revolution of Lincoln consolidated the open club, inviting a rapid economic development in contrast to the decline of Russia during totalitarianism.

Open Entry

The central question about political clubs with open entry concerns how much openness there is. It has often been the case that open entry was restricted to some groups of club members but denied other groups, who sometimes were not even regarded as “members” although living within the borders of the club. Various exclusion criteria have been employed: race, income and wealth, age, religion, social strata. Open entry entices fierce competition, focussing upon the electoral mechanism. Elections in closed political clubs have entirely different functions than channelling competition into peaceful channels. It no doubt requires a structure of institutions.

Yet, open entry is never completely free in the sense that anybody could enter politics just as he or she wishes. The typical manner in which free entry is played out is the competition among the groups of leaders we call “political party”.

The political party tends to be the key actor in open entry. Its rationale is to gather individual forces into a collective effort to win the elections, opening the road to the leadership positions. Leadership in a political club offers not only remuneration R but also some control over the value V in society.

Political parties are nothing but coalitions among individuals who wish to compete in open entry. Together they stand a better chance of gaining than going along alone. To act as a collective unit, they need some coherence of commitments – the ideology. The party program or platform makes it possible for the coalition of party members to campaign with a reasonably clear message that has some coherence in the views of supporters. On the other hand, the necessity of a political party for competing successfully constitutes a real hindrance for loners who would wish to enter but lacks a party affiliation.

Not even a charismatic person can in open entry alone. Some form of political party is necessary. To distinguish one group of political from another, these coalitions we can “parties” employ a variety of tools: ideology, slogans, labels, logos, etc. The coherence of a party is never 100 per cent, as infighting and factions often occur. Politicians interpret the vocabulary of the party differently.

The prevalence of political parties in open entry implies that party organisations with huge staff and resources enter the basic equation of R and V . One could argue that the remuneration of the party staff should be the burden of the political elite or its followers, but one often encounters public mechanisms for the reimbursement of the costs of political parties, i.e. their R is taken from V . The political party may be inclined to use whatever command it has over V to benefit especially themselves – see the literature on the political business cycle.

Partitocrazia involves a fierce struggle among various elite groups for remuneration and access to leadership position. It may degenerate into infighting to such an extent that the party in question cannot operate adequately. And it may make a political club ungovernable with huge costs for society.

In open entry political clubs, political parties or coalitions among leadership groups compete on the basis of promises and blame. The first strategy is basically what the parties claim they can

do for the size of V: Higher economic growth; Investments in infrastructure; Improvements in public services; Better control of violence and crime, including terrorism now; More of income and wealth redistribution. Are these promises credible? Could not the leadership of a club result in losses in V? Here is where the logic of political competition comes in. The second strategy is the blame, with a strong call for change. In open entry clubs, political competition should in principle be conducive to the maximisation of V, given a modest R. However, the parties in competition may promise too much and blame unreasonable.

The principle of spoils (*spolia*) is essential to party government in open entry clubs. By winning an election, the party(ies) may employ state resources (jobs, contracts, assignments, etc.) to remunerate the party leaders for their effort to secure victory. In some countries, the costs of the political parties have been more or less entirely transferred to the state coffers by means of public support for them. Spoils, however, require electoral success.

Exit

The exit problematic in political club is of great importance, as it reveals essential aspects of the club. Exit can be chaotic or violent on the one hand, as in closed political clubs. Or exist can follow ordinary patterns, like retirement at old age, electoral loss, transition to other roles in the political club, etc. Also the open access political clubs can experience violent forms of exist, as when leaders are assassinated. However, the unpredictable forms of exit are typical of the closed political clubs.

The exit question is how to induce leaders to step down or end their power position. In closed political clubs, all forms of sorties are possible:

- Natural death: Some leaders are so firm in control of events in closed political clubs that only death from age or illness can eliminate them: Stalin, North Korean leaders, Mao, etc;
- Unnatural death: leaders are from time to time murdered, either by a secret plot from their inner circles or through a popular uprising: Ceausescu or Mussolini for instance as examples of the latter:
- Suicide: The most spectacular case is of course that of Adolf Hitler;
- Escape: A convenient form of exit is the chosen exile, like Ben Ali managed when Tunisia turned against his dictatorship;
- Expatriation: When a long-lasting figure is thrown out of his/her position, sending him or her far away constitutes a form of exit: the Shah of Persia would be an example;
- Confinement: the forceful removal of a leader can place him/her in an involuntary confinement within the country. It could be an imposed retirement (Chrustschow) or house arrest, as with Aung San Suu Kyi in Myanmar;
- Imprisonment: in order to exile leaders, they may simply be put in prison (Mubarak) or sent to labour camps, as in Soviet Union and Nazi-Germany.
- Foreign invasion: one cannot neglect the relations to other countries when leaders engage in major atrocities; the falls of Pol Pot or Mobutu are examples.

The unpredictability of exit appears starkly when leaders attempt to stay on longer than agreed upon from the start of their rule. In the grey zone between a closed club or an open club, leaders often fall for the temptation to prolong their period in power, stopping the expected exit from the scene. Many leaders in Africa have secured long time power holdings simply by changing the constitution to allow for unlimited re-election, or having no elections at all (Meredith, 1997).

Open entry can be undone by several means of the *coup d'état*, which leads to a shorter or longer closed political club when successful. It may of course fail, sometimes resulting in anarchy.

ASYMMETRIC INFORMATION

The two essential parameters in a political club is the remuneration R of the leaders or the political elite as well as the value of the output that the leadership produces, V . The information about R and V is known to the "agents", but not to the principal – asymmetric information. The members of a political club seldom know the full range of remuneration R to the political leaders: salaries, pensions, perks, etc. And they get to know the entire situation of the public sector and the whole economy much later than the political elite. In closed political clubs, they may never know much about R and V . In open political clubs, competition among leaders may reduce the amount of asymmetric information about R and especially V .

Closed political clubs are characterized by massive amounts of asymmetric information. The members of the club know little about the key parameters, R and V . They are left with assurances, i.e. cheap talk and promise never to be kept. Let me give two drastic examples:

- Nazi-Germany: Hitler made himself the "Fuehrer" of the German people, with the promises of a thousand years Reich, but assembled a great personal fortune by various tricks, only to leave the country with almost no value left at his suicide;
- Sierra Leon became independent from the British with flourishing public and private sectors. The political runs down all value in their chase for "blood diamonds", in order to augment their personal remuneration.

This conflict between R and V often occurs in closed political clubs. In Africa after independence, one leader after the other fell for the temptation to increase remuneration R at the cost of the value of output, through embezzlement, patronage and conspicuous consumption in the entourage of the political elite. As R went up, V stagnated or declined.

The tension between R and V are certainly not absent in open political clubs. The full range of R for political leaders is hardly known even in competitive political clubs, where sometimes leadership creates disastrous outcomes with value losses. One example is the Operation Cobra II (Iraqi Freedom), masterminded with little transparency by president Bush, vice-president Cheney and defence secretary Rumsfeld, resulting in enormous costs for the US, both personnel and resources, while this leader trio somehow ended up as millionaires or billionaires, partly due to relationships with the defence industry.

Yet, open clubs do try to reduce the amount of asymmetric information between leaders and members, partly through competing elites (counter-veiling agents) and partly through the institutions of constitutionalism (Furubotn and Richter, 1991, 2005; McIlwain, 1958; Neumann, 1986; Vile, 1967; Weingast, 1989).

The state forms a political club, comprising as members the people of the country in question and the political elite as its leaders. Due to transactions, leadership is a necessity for delivering a public sector as well as promoting a thriving private sector (Rao, 2002). In this human organisation, two parameters are central: the remuneration of the political elite R , and the value V of the output, directly and indirectly that the leadership accomplishes. The parameter R targets the motivation of leaders, whereas the parameter V examines their performance.

Approaching the state or government as a political club with leadership and membership entails an analysis of entry and exit in both open and closed political systems. The members

would prefer low remuneration and high performance, but it does not always occur. On the contrary, in closed or semi-open political clubs, we find excessive remuneration and negative performance. In marginal cases of political exploitation, R may go as high as V.

How turbulent entry into and exit from political clubs can be appears from the lives of Boukassa (Central African Republic) or Sankara (Burkina Faso) or Nkrumah and Ali and Benazir Butto (Pakistan). Predictable and peaceful avenues of exit from the political club stabilises also the entry into it.

Political instability is not absent from “well-ordered societies” (Rawls), but it takes another form than *coup d’etat*, embezzlement and states of emergency.

Under any political or in any state, the citizens hire and instruct a set of agents – politicians and officials - to work for them against remuneration to be taken out of the value that the agent contributes to. The agents can put in high effort or low effort, schematically speaking, which has an impact upon the value that is created. The factor “effort” captures all that lead an agent to be either highly or poorly performing. Both parties are assumed to maximise their utility, which for the agents involves compensation for the disutility that high effort imposes upon him/her. Thus, there arises a gaming situation where the agent wants to maximise his/her compensation while the principal wants to maximise the value that the agent helps producing minus the remuneration of the agent. All kinds of solutions to this game are conceivable, depending upon contingencies such as the availability of agents as well as the existence of asymmetric information. In politics, it is the agents who know the most.

The principal would wish to maximise the contribution of the agents to total value and its fair distribution in society, subject to the restriction that the agents need to be remunerated for their effort. Thus, we have the two key equations: (1) Principal: Max total value or income subject to fairness in distribution; and (2) Agent: Max remuneration covering both salary and perquisites. Given perfect information, there is a first best solution to the problem, namely: that the principal installs the most efficient agents, taking (1) and (2) into account. However, given asymmetric information the principal is forced to look for second best solutions that all will involve a better deal for the agents.

In well-ordered societies, the political agents in government operate the set of governance mechanisms that we call “state” (Kelsen, 1961; 1967). It claims sovereignty over its country, but it enters into a web of relationships with other states, governed by the rule of law principles of the international society, namely the so-called *public international law* (Schwobel, 2011).

A state may be seen as flowing from an agreement among the members about helping each other in securing peace and stability. A body of rules would codify this mutual agreement. A state quickly develops a division of labour between leaders and followers, the subgroup who implements the rules and the subgroup who follow the rules in their behaviour. I will call the followers the “principal” of the political club and the leaders the “agents”. Thus, the political club will be modelled as confronted by the principal-agent problematic, comprising *inter alia*:

- Who are the political agents?
- How are these agents selected?
- Can agent power be laid down formally?
- Are there restraints on the power of the agents?

In politics, transaction costs are minimised by handing over the responsibility for the tasks of the state to a set of people, called the leaders and their public servants. I will employ the word: “agents”. The agents provide the members of the state – the citizenry or the principal – with the chief goods and services of this type of community, when they are successful that is.

ENEMIES OF GOOD GOVERNANCE: ISLAMIC FUNDAMENTALISM

To understand the 20th century emergence of radical Islamic fundamentalism and its doctrines about *Jahiliyyah*, *Caliphate* and *Jihad*, I will look at the *three key personalities* behind the ideology or religion of radical Islam movements: Mawdudi, Qutb and Faraj.. Modern Islamic fundamentalism was to a significant extent conceived in the Indian *Deobandi* movement, from which comes Mawdudi, the Pakistani who inspired the Egyptians: Qutb and Faraj. Their ideas about islamisation, caliphate and jihad constitute the very *theoretical legitimation* of terrorist events.

When searching for the roots of radical Islam, one cannot bypass Moslem thought in greater India under British rule. Several non-Arab scholars had a profound influence on Islam in Arabia, such as for instance Mawdudi, theorising not only islamisation but also the relevance of the now blossoming *Islamic finance*. More research is needed to uncover the influence of Muslim thought in India before partition on the Koranic civilisation, especially the *Deobandi School*.

The Koranic Civilisation

Radical Islamic fundamentalism has as its main objective to guard the borders of the Koranic civilisation to other religions. Thus, they fear proselytise or mission or conversion campaigns by other religions, the occurrence of apostasy among their own adherents as well as the emergence of schisms or dogmatic splits within their own ranks. All the world religions have reacted with violence against these three threats. Perhaps the posture of Islam is the least open or tolerant in these matters. In the Muslim civilisation marriage, for instance, entails that a women adhering to another religion than Islam converts to the same religion as her husband. It is not difficult to find within the Koran very strong admonitions against proselytism, apostasy and schisms.

Global radical Islamic terrorism has a disastrous impact not only upon the groups targeted but also upon the Muslim countries themselves, setting in motion millions fleeing. In his comparative religion studies, Max Weber put the concept of *jihad* at the centre of Islam – “a religion of warriors” - in his short historical analysis of the fate of this religion with the Prophet and after him. Several Muslim scholars would sharply deny the correctness of Weber’s theory of Islam as a religion of warriors, pointing to the fundamental fact that Islam has just five fundamental duties, which do not include jihad (Huff and Schluchter, 1999).

The new concept of jihad together with the new caliphate, based upon the notion of “pagan ignorance” (*jahiliyyah*) constitute the core of the radical transformation of Islam in the 20th century by three men. But it has not brought happiness and prosperity to Moslems in general.

“Islamisation”

Mawdudi, Abul ‘Ala’ (1903–1979) has been considered as the architect of contemporary Islamic revival. He is considered by many to be the most outstanding Islamic thinker of the 20th century. Mawdudi was influenced by Hasan al-Banna and the Egyptian Muslim Brotherhood. He founded the *Jama’at-i-Islami* movement in 1941 in the Indian sub-continent, an extremely well-organised association committed to the establishment of an Islamic world order that has

played an important role in the politics of Pakistan, India, Bangladesh and other South-East Asian countries.

The Muslim community in India responded to the British destruction of the Mogul Empire in 1859 with a seminary in Deobandi in 1866 by former students of the Delhi madrassa, destroyed after the "Revolt of 1857". The new seminary in Deobandi aimed at (1) indoctrinating Muslim youth with Islamic values, and (2) cultivating intense hatred towards the British and all foreign (i.e. non-Islamic) influences. The seminary exposed their students only to the spiritual and philosophical traditions of Islam with the goal of islamisation of state and society in view.

Mawdudi opposed to the secularist nationalist Muslim League led by Jinnah, but on the formation of independent Pakistan he emigrated there, hoping to influence a change from being merely a state for Muslims to an Islamic state. His political involvement and criticism of government policies, as well as his anti-Ahmadiya agitation, led to his imprisonment in 1953, but the death sentence passed was never carried out. Mawdudi saw Islam as threatened by a wave of Westernisation. He criticised the West and the Westernised Muslim elites as degenerate, and he called for a renewal and purification of Islam. He conceived of true Islam as a total comprehensive system and ideology, incorporating society, politics and the state. Mawdudi differentiated sharply between jahiliyyah, which included most contemporary Muslim societies and true Islam. His goal was an ideological Islamic state based on God's sovereignty (*hakimiyya*) and on Sharia. As an explanation for the decline of Muslim power, Mawdudi concluded that diversity was the culprit: the centuries old practice of interfaith mixing had weakened and watered down Muslim thought and practice in that region of India. In his reinterpretation of Islam, he suggested the following:

(Q1)" Islam is a revolutionary faith that comes to destroy any government made by man. Islam doesn't look for a nation to be in better condition than another nation. Islam doesn't care about the land or who own the land. The goal of Islam is to rule the entire world and submit all of mankind to the faith of Islam. Any nation or power in this world that tries to get in the way of that goal, Islam will fight and destroy."

(Q2)" It [Jamaat-e-Islami] is not a missionary organisation or a body of preachers or evangelists, but an organisation of God's troopers."

(Q3)" In our domain we neither allow any Muslim to change his religion nor allow any other religion to propagate its faith."

(Q4)" Leaves no room of human legislation in an Islamic state, because herein all legislative functions vest in God and the only function left for Muslims lies in their observance of the God-made law."

Thus, Mawdudi sought to purge Islam of what he looked upon as alien elements. Moreover, the social and political ties with Hindus must be severed. Non-Muslims, for Mawdudi, constituted a threat to Muslims and to Islam and must be contained by restricting their rights. Mawdudi and others founded the Jama'at al-Islami Party in Lahore, Pakistan in 1941. Mawdudi based his call to arms against those who reject Islam on Sura 2: 190–193 from the Koran and on the Hadith, "I have been ordered to fight people (al-nas) until they say 'There is no God but God'. If they say it, they have protected their blood, their wealth from me. Their recompense is with God".

Mawdudi envisioned a particular set of institutions for his ideal Islamic state. An Islamic state will have a President, an elected *shura* council (consisting only of Muslims who have been

elected solely by Muslim suffrage), an independent judiciary and a cabinet formed by a Prime Minister. Dhimmis (non-Muslims living under Muslim protection) would have the right to vote in lower-level (i.e. municipal) elections as well as the right to serve on municipal councils and in other local organisations. Mawdudi's objective was jihad until the whole natural universe has been brought under the rule of Islam, as he states, quoted here from Jihad in Classical and Modern Islam (1996):

(Q5) "Islam wants the whole earth and does not content itself with only a part thereof. It wants and requires the entire inhabited world. It does not want this in order that one nation dominates the earth and monopolizes its sources of wealth, after having taken them away from one or more other nations. Islam requires the earth in order that the human race altogether can enjoy the concept and practical program of human happiness, by means of which God has honoured Islam and put it above the other religions and laws. In order to realize this lofty desire, Islam employs all forces and means that can be employed for bringing about a universal all-embracing revolution sparing no efforts for the achievement of his supreme objective. This far-reaching struggle that continuously exhausts all forces and this employment of all possible means are called Jihad." (Peters, 1996: 128).

The idea of islamisation wreaks havoc in Muslim countries. Since he included the Shias in the set of non-believers, he bears responsibility for the tragic civil war in the Koranic civilisation:

(Q6) Mawdudi wrote regarding the Imami Ja'fari Shia, "despite their moderate views (relative to other Shia sects), they are swimming in disbelief like white blood cells in blood or like fish in water."

Mawdudi's thought shows without doubt that non-Arabs have played a major role in Islamic religion and philosophy. His ideas were taken up by two important Arab scholars, thus continuing the very important and dire Deobandi link in present Islam.

"Re-inventing the Caliphate"

Radical Islamic societies (*jama'at*) have emerged out of the Muslim Brotherhood founded 1928, but drawing mainly on the thought of its main ideologue, Sayyid Qutb (1906-1966). Qutb's reinterpretation of several key Islamic concepts inspired some to split off from the Brotherhood and use his writings to legitimise violence against the regime. He argued that the existing society and government were not Muslim but rather dominated by "pagan ignorance" (*jahiliyyah*). The duty of righteous Muslims was to bring about God's sovereignty (*hakimmiyya*) over society, denounce the unbelief (*takfir*) of the current national leaders, and carry out a holy struggle (jihad) against them..

Qutb was an Egyptian. The first excerpt below comes from an early work, Social Justice in Islam, which he wrote in 1949. Qutb builds on the Islamic idea of *tawheed* (the singularity of God and, therefore, of the universe):

(Q1) "So all creation issuing as it does from one absolute, universal, and active Will, forms an all-embracing unity in which each individual part is in harmonious order with the remainder ... Thus, then, all creation is a unity comprising different parts; it has a common origin, a common providence and purpose, because it was produced by a single, absolute, and comprehensive Will ... So the universe cannot be hostile to life, or to man; nor can "Nature" in our modern phrase be held to be antagonistic to man, opposed to him, or striving against him. Rather she is a friend whose purposes are one with those of life and of mankind. And the task of living beings is not to contend with Nature, for they have grown up in her bosom, and she and they together form a part of the single universe which proceeds from the single will." (Social Justice in Islam)

In Milestones he wrote (Beirut: The Holy Koran Publishing House, 1980: 7-15, 286):

“If we look at the sources and foundations of modern ways of living, it becomes clear that the whole world is steeped in Jahiliyyah (pagan ignorance of divine guidance), and all the marvellous material comforts and high-level inventions do not diminish this Ignorance. This Jahiliyyah is based on rebellion against God’s sovereignty on earth: It transfers to man one of the greatest attributes of God, namely sovereignty, and makes some men lords over others. It is now not in that simple and primitive form of the ancient Jahiliyyah, but takes the form of claiming that the right to create values, to legislate rules of collective behaviour, and to choose any way of life rests with men, without regard to what God has prescribed. The result of this rebellion against the authority of God is the oppression of His creatures.”

Qutb rejected all forms of study of religions, or a faculty of religion at Western universities. There is only ONE true religion in the world! His most important achievements to Moslems were his reinterpretation of traditional concepts such as hakimiyya, jahiliyyah and takfir as well as the caliphate, turning them into contemporary revolutionary concepts in his Islamic ideological system.

(Q2) “The Islamic civilisation can take various forms in its material and organisational structure, but the principles and values on which it is based are eternal and unchangeable. These are: the worship of God alone, the foundation of human relationships on the belief in the Unity of God, the supremacy of the humanity of man over material things, the development of human values and the control of animalistic desires, respect for the family, the assumption of the vice regency of God on earth according to His guidance and instruction, and in all affairs of this vice-regency, the rule of God’s law (Sharia) and the way of life prescribed by Him.”

(Q3) “Humanity will see no tranquillity or accord, no peace, progress or material and spiritual advances without total recourse to Allāh. This, from the Qur’ānic point of view, can mean only one thing: the organisation of all aspects of human life in the Qur’ān. The alternative would be corruption, regression and misery.”

“Qutubism” stands for the core of radical Sunni fundamentalism. Qutb is most widely read in the Koranic civilisation – especially his Milestones, but also feared for his violent message. If the idea of islamisation is combined with the notion of the caliphate, the third logical element in the new Islamic terrorism is the re-interpretation of the idea of jihad.

“Offensive Jihad”

Faraj recruited for his organisation mainly in ahli (independent) mosques in the poor quarters of Cairo, where he delivered Friday sermons. He succeeded in recruiting members of the presidential guard, military intelligence and civil bureaucracy, as well as university students. Faraj’s short book Al-Farida al-Gha’iba (The Neglected Duty) had an immense impact on all radical Islamic movements. Following Sadat’s assassination, Faraj was executed in 1982.

Whereas Mawdudi was a learned theologian writing massively on The Koran and its interpretations, delivering a long list of books and pamphlets, Faraj only published one text. But its message about jihad added the explosive fuse to the ideas of Mawdudi and Qutb concerning islamisation and unification of religious and secular leadership. Faraj was read among the radicals, in seminaries or in prison, who later went on to set up terrorist groups, in and outside of Egypt. It should be emphasized that the many well-known leaders of these groups had known each other, reading and discussing Qutb and Faraj.

Let me take a few quotations (Q) from Faraj:

(Q1) "Hence the implementation of Islamic law is incumbent upon the Muslims. Therefore establishing the Islamic State is obligatory upon them because the means by which the obligation is fulfilled becomes obligatory itself. By the same token, if the state can only be established by fighting, then it is compulsory on us to fight. Besides the Muslims were agreed upon the obligation of establishing the Khilaafah, the declaration of which depends on the existence of the core, which is the Islamic State." (page 20)

(Q2) "So fighting in Islam is to raise Allah's word highest, either offensively or defensively. Also, Islam was spread by the sword, but only against the leaders of kufr, who veiled it from reaching the people, and after that no one was forced to embrace it. It is obligatory upon the Muslims to raise their swords against the rulers who are hiding the truth and manifesting falsehood, otherwise the truth will never reach the hearts of the people." (page 51-52)

(Q3) "As for the Muslim lands, the enemy resides in their countries. In fact the enemy is controlling everything. The enemies are these rulers who have snatched the leadership of the Muslims. Thence Jihad against them is fardh 'ayn. Besides, the Islamic Jihad is now in need of the effort of every Muslim. And it should be borne in mind that when Jihad is fardh 'ayn (an individual obligation), it is not required to seek permission from one's parents for the to march forth as scholars said: 'it becomes like praying and fasting.'" (page 61)

(Q4) "And what if the scholars of the Salaf saw our scholars of today - except those upon whom Allah has shown Mercy - who have inclined to these tyrants, beautified their actions to them, made fair their murders of the Muslims, the mujahedeen (upholders of Tawheed - Oneness of Allah), weakening their honour by issuing fatwa (legal verdicts) after fatwa to make their thrones firm, and safeguard their kingdoms, by labelling everyone opposed to them as a rebel or khaariji (one of the extreme deviant sect of the khawaarij)?" (p. 108)

"Holy terror" is a term for "holy assassination" and was propagated by Muhammad Abd al Salam Faraj (1954-1982) in his booklet, *The Neglected or Absent Duty*. Faraj arrived at this jihad (holy war) duty by considering and rejecting non-violent options: participation in benevolent societies; obedience to God, education, abundance of acts of devotion, and occupation with the quest of knowledge; exerting oneself in order to obtain an important position; and democratic options such as engaging in civil liberties such as freedom of speech, the founding of a political party to compete freely with other parties in elections, and the creation of a broad base of support resulting in majority rule. Faraj believed that none of these would lead to the messianic goal of establishing of an Islamic state and ultimately reintroducing the caliphate.

Despite the imprisonment and execution of al-Jihad's leaders following Sadat's assassination, offshoots managed to regroup, declaring jihad against Mubarak's regime. Al-Jihad has continued to be linked to terrorist incidents and outbreaks of communal violence ever since. One wing seems to be loyal to Abbud al-Zammur, one of the original founders, now imprisoned in Egypt. Another wing is called Vanguard of the Conquest or The New Jihad Group led by al-Qaeda's Ayman al-Zawahiri.

Al-Qaeda, ISIS, Boko Haram, Al Shabaab and the Talibans are Sunni Muslim terrorist groups that consider Shias to be heretics. Osama Bin Laden, al-Zarqawi and al-Zawahiri are close to either Salafi, or Deobandi or Wahhabi brands of Sunni Islam. And the leading thinkers behind modern Islamist movements such as al-Qaeda are all Sunnis: Abul-Ala Mawdudi, Sayyid Qutb and Muhammad Faraj. Their ideas are communicated daily in the schools, *madrasas* as well as in the religious faculties at universities.

ISIS replacing Al-Qaeda

How the ISIS group related to Al Qaeda in Iraq is not fully known. The key person was Abū Muṣ‘ab az-Zarqāwī, who was a leader of the insurgence against the Allied invasion of Iraq. He was not only violently anti-Western but also a sworn enemy of Shiism. He was so bloody in his strategy and tactics – suicide and car bombs – that al-Zawahiri objected, leading to a split from Al Qaeda by az-Zarqāwī. After his death, his main ideas inspired the creation of ISIS. These are the basic ideas of the man called “AMZ”:

“i. Remove the aggressor from Iraq. ii. Affirm *tawhid*, oneness of God among Muslims. iii. Propagate the message that “there is no god but God”, to all the countries in which Islam is absent. iv. Wage jihad to liberate Muslim territories from infidels and apostates. v. Fight the *taghut* ruling Muslim lands. vi. “Establish a wise Caliphate” in which the Sharia rules supreme as it did during the time of Prophet Mohammad. vii. “Spread monotheism on earth, cleanse it of polytheism, to govern according to the laws of God...” (Hashim, 2014)

When Al Qaeda asked AMZ not to target ordinary Moslems, especially Shias, the reply was in the style of future ISIS (Hashim, 2014):

“We did not initiate fighting with them, nor did we point our slings at them. It was they who started liquidating the cadres of the Sunni people, rendering them homeless, and usurping their mosques and houses.”

Thus, AMZ or az-Zarqāwī is much more to be seen as the forerunner of ISIS than al-Zawahiri. But his ideology or religion is the radical Sunni fundamentalism, created by the three: Mawdudi, Qutb and Faraj. Al-Zawahiri wrote several books on Islamic movements, the best known of which is The Bitter Harvest (1991/1992), a critical assessment of the failings of the Muslim Brotherhood. In it, he draws not only on the writings of Qutb to justify murder and terrorism, but prominently references Pakistani Jamaat-i-Islami founder and ideologue Mawdudi on the global mission of Islamic jihad. Global jihad as Mawdudi had prescribed became al-Zawahiri’s obsession, However, the ISIS is now calling the shots and they employ the ruthless tactics of AMZ or az-Zarqāwī.

Sunni fanaticism acts like the scourge of Islam for the Middle East, leaving behind immense human and capital destruction. How can ecological policy-making be feasible in so-called “failed states”? The Muslim countries and communities are confronted with handling major environmental resources, like water, forest, sewage, waste, oil and gas, etc. What can a government do if confronted by the “religion of warriors” (Weber). Global ecological coordination will also be hampered by the lack of rule of law in many African and Asian countries – no doubt a legacy of oriental despotism, colonialism and widespread corruption.

ASIA: CHINA, SOUTH EAST ASIA AND THE KHANATES

Milton Friedman (2002, 2008) argued over a long career for the basic idea that capitalism and democracy are closely related. The argument hinges on an intimate connection between economic and political freedom. However, the empirical evidence does not vindicate this argument. The empirical analysis also shows that a set of countries deviates from this interaction, managing to reach both affluence and state firmness without institutionalising rule of law II. Economic freedom and political freedom are not as closely relate as Friedman claimed, especially not in the ASEAN region.

The association between the rule of law I and rule of law II is much weaker than the connection between economic output and rule of law I, especially in the ASEAN region. Higher levels of

affluence are yet to result in voice and political accountability in East and South East Asia. Most countries in the ASEAN region are at zero or below when it comes to rule of law II.

Sen's (2000) theory that economic development is freedom must be understood against the background of his analysis of freedom as capability (Sen 1995). Of course, it is not the sole conception of freedom. In political theory, there is Hobbes' idea of freedom as absence of heteronomy; that is, the lack of constraints imposed on a person by other people or government.

There is also Rousseau's notion of freedom as participation; that is, people are free when they together decide on the laws that restrain their lives. Following these concepts of freedom, it is necessary to focus on the scope and range of rule of law I and II in a country, with human rights as well as voice and accountability being considered. Countries may experience tremendous economic growth without experiencing similar advances in freedom as human rights or freedom as participation in collective choice. As stated above, Sen (2000) maintains that economic progress results in increasing freedom. From a normative point of view, this is a highly acceptable or desirable standpoint. But is it really true in the world we live in? In the ASEAN region, rapid economic development in several countries has not yet resulted in the rule of law. Stunning economic advances in several of the East and South East Asian countries have been accomplished, without resulting in either economic freedom or political freedom. Singapore and Hong Kong are interesting exceptions as these two *entrepot* entities score high on rule of law I. Only Japan, Taiwan and South Korea come out at a reasonable level on both types of rule of law: rule of law I as judicial autonomy and legal integrity, and rule of law II as voice and political accountability. The typical global association between economic advances and the rule of law is weaker in the ASEAN region than in other regions of the world. This is worthy of more detailed research along the lines indicated in this discussion.

CONCLUSION

Under any political or in any state, the citizens hire and instruct a set of agents – politicians and officials - to work for them against remuneration to be taken out of the value that the agent contributes to. The agents can put in high effort or low effort, schematically speaking, which has an impact upon the value that is created. The factor "effort" captures all that lead an agent to be either highly or poorly performing. Both parties are assumed to maximise their utility, which for the agents involves compensation for the disutility that high effort imposes upon him/her. Thus, there arises a gaming situation where the agent wants to maximise his/her compensation while the principal wants to maximise the value that the agent helps producing minus the remuneration of the agent. All kinds of solutions to this game are conceivable, depending upon contingencies such as the availability of agents as well as the existence of asymmetric information. In politics, it is the agents who know the most.

The principal would wish to maximise the contribution of the agents to total value and its fair distribution in society, subject to the restriction that the agents need to be remunerated for their effort. Thus, we have the two key equations: (1) Principal: Max total value or income subject to fairness in distribution; and (2) Agent: Max remuneration covering both salary and perquisites. Given perfect information, there is a first best solution to the problem, namely: that the principal installs the most efficient agents, taking (1) and (2) into account. However, given asymmetric information the principal is forced to look for second best solutions that all will involve a better deal for the agents.

In Rawlsian well-ordered societies, the political agents in government operate the set of governance mechanisms that we call "state" (Kelsen, 1961; 1967) . It claims sovereignty over

its country, but it enters into a web of relationships with other states, governed by the rule of law principles of the international society, namely the so-called *public international law* (Schwobel, 2011).

A state may be seen as flowing from an agreement among the members about helping each other in securing peace and stability. A body of rules would codify this mutual agreement. A state quickly develops a division of labour between leaders and followers, the subgroup who implements the rules and the subgroup who follow the rules in their behaviour. I will call the followers the “principal” of the political club and the leaders the “agents”. Thus, the political club will be modelled as confronted by the principal-agent problematic, comprising *inter alia*:

- Who are the political agents?
- How are these agents selected?
- Can agent power be laid down formally?
- Are there restraints on the power of the agents?

In politics, transaction costs are minimised by handing over the responsibility for the tasks of the state to a set of people, called the leaders and their public servants. I will employ the word: “agents”. The agents provide the members of the state – the citizenry or the principal – with the chief goods and services of this type of community, when they are successful that is.

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The Role of Symbiotic Approaches to Socio-Cultural Change in The Twenty-First Century: The Principles and Uses of The Symbiotic Approach to Socio-Cultural Change

Sujay Rao Mandavilli

ABSTRACT

This paper emphasizes the importance and relevance of the proposed Symbiotic school of socio-cultural change in the context of the Twenty-first century. The approaches that we propose may also be referred to as 'Cultural Osmosis', and seek to replace older schools and theories of Cultural Change. This would lead to Cultural integration with different cultures still retaining some of their own unique characteristics. The ethics and the pros and cons of activism are also explored, along with their role in aiding cultural remediation. This paper also introduces concepts such as the theory of mind-orientations, the theory of cultural orientations and the theory of Mind space as well. These approaches are expected to integrate with Applied Anthropology and Developmental Anthropology take them to greater heights. We conclude by discussing the potential real-world applications of Symbiotic Models of socio-cultural change.

INTRODUCTION

Various definitions of the term culture have been proposed by different Cultural Anthropologists such as Edward B. Tylor, Bronislaw Malinowski, Marwin Harris and others over the ages. Among these, the Edward B. Tylor's definition is generally considered to be the most comprehensive. He stated, "Culture or civilization taken in its broad ethnographic sense is that complex whole which includes knowledge, belief, art, morals, laws, customs, and any other capabilities and habits acquired by man as a member of society."

Various schools of cultural change have emerged ever since the field of Cultural Anthropology began to take shape some one hundred and fifty years ago. The oldest school of cultural change is the Uni-linear school of evolution which was propounded by Edward B. Tylor and Lewis Henry Morgan, among others. This school proposed that all societies passed through the stages of primitive savagery, barbarianism and culminated ultimately in complex civilizations. The Uni-linear school of evolution was replaced by the multi-linear school of evolution, and this school was founded by Leslie A. White, and Julian Steward. Another important school of thought is the Diffusionist school of thought which evolved in the late nineteenth and early twentieth Centuries. According to this school, cultural change began in a particular region, and spread to other regions. The school of Historical Particularism proposed by Franz Boas, rejected Uni-linear approaches to evolution, and proposed that cultural attributes were primarily due to that culture's unique historical factors. The Culture and Personality school founded by Ruth Benedict, Margaret Mead, Abram Kardiner and Ralph Linton attempted to study the relationship between human personality and cultural attributes. The idea of functionalism proposed by Bronislaw Malinowski, A R Radcliffe Brown and others in the 1930's, sought to identify the roles played by different elements of a culture in maintaining a cultural or a social system. The idea of Structuralism was propounded by Claude Levi-Strauss.

According to him, elements of culture such as arts, ritual and the patterns of daily life were surface representations of the underlying structure of the human mind.^{1 2 3 4 5}

In two previously published papers, we had proposed the 'Symbiotic approach to Socio-cultural change' which we believed would be more relevant for the needs of the Twenty-first century characterized by the disappearance of borders and the spread of technology. In this paper, we present the salient features of this approach for international audiences, with the hope that this will be the springboard for the exchange of meaningful ideas and debates.^{6 7}

One of the key principles of this approach is that socio-cultural integration tends to increase over a period in time due to technological factors and better socio-economic integration. While there could be periods of reactionary or self-imposed autarchy in different parts of the world from time to time, these would pale into insignificance or eventually be left by the wayside. This would be akin to an 'Ascending wave', and make this approach all the more relevant. We had also proposed that a pro-active approach to socio-cultural change be adopted instead of studying cultures as merely objects of interest. This will ensure that undesirable elements of a culture are rooted out, and more desirable aspects be allowed to flourish. This is related to the principle of 'Social Darwinism'; however, desirable aspects of a culture do not always persist, as the relatively undesirable aspects of more dominant cultures tend to propagate and dominate in the long-term. Cultural traits also do not disseminate widely in a society due to factors such as lack of education and infrastructure. We had also proposed the philosophy of neo-centrism. This would involve an ideology-free and culture-neutral approach to an assessment of issues characterized by dialectical approaches. Another feature of this approach is its long-term orientation which means that long-term goals and considerations must take precedence and short-term goals and concerns, must be eventually merged with long-term goals and concerns.

The Anthropologist would play a crucial role in bringing about change by orchestrating government intervention or intervention through government parties. This must be done carefully and after taking a culture's sensitivities into account. This is by no means easy, and he may choose to do this through dialogue, discussions and deliberations. In order to do this, he would also need to break down a culture into its constituents or traits and attributes. This is typically known as a cultural taxonomy. Cultures are also associated with various enablers such as the strength of government institutions, the legal framework, the education system, language policy, the role of religion in society, social security, risk appetite and appetite for innovation. Etc and these would dictate the flexibility of a culture.

We had also categorized cultures into the following categories:

1. Dominant or influential cultural systems which would include countries such as the USA.
Dominant cultural systems would be associated with technological superiority,

¹ A History of Anthropology, Thomas Hylland Eriksen and Finn Sivert Nielsen, Second Edition, Pluto Press

² A New History of Anthropology Edited by Henrika Kuklick, Blackwell publishing, 2008

³ Anthropology Carol R. Ember, Melwin Ember, Peter N. Peregrine, 12th Edition, Pearson Education Inc., 2008

⁴ Cultural Anthropology Barbara Miller, 6th Edition, PHI Learning Private Limited, 2011

⁵ Evolutionary Theories of Cultural Change: An Empirical Perspective, Richard R. Nelson Columbia University

⁶ Articulating comprehensive frameworks on socio-cultural change: Perceptions of social and cultural change in contemporary Twenty-first century Anthropology from a 'Neo-centrist' perspective Published in ELK Asia Pacific Journal of Social Sciences Volume 3, Number 4 (July 2017 – September 2017) Sujay Rao Mandavilli

⁷ The relevance of Culture and Personality Studies, National Character Studies, Cultural Determinism and Cultural Diffusion in Twenty-first Century Anthropology: An assessment of their compatibility with Symbiotic models of Socio-cultural change ELK Asia Pacific Journal of Social Science Volume 4, Issue 2, 2018 Sujay Rao Mandavilli

economic influence, cultural hegemony, military influence, soft power, military influence, population and population growth.

2. Non-Dominant cultural systems: Examples of such systems include China and India. Even though such cultures may have some potential, they lack dominance in the international arena due to an absence of hard power or soft power. This would ensure that their cultural traits do not spread.
3. Fringe or Marginal cultural systems: Examples of such systems include Tunisia and Zambia. Such countries are insignificant and cannot impact the world to any substantial degree.
4. Closed or Autarchic cultural systems: Examples of such cultures are North Korea which are isolated from the rest of the world. These cultures may also be assessed based on their Degree of Autarchy.

The process of symbiosis between these cultural systems would determine the global socio-cultural landscape, and this is an ongoing process which will continue ad infinitum. This may be left to happen by itself, and this would constitute a laissez-free approach.

Several factors would determine a culture's ability to dominate. These include Technological superiority and Military hegemony, Cultural hegemony and soft power, Economic Influence, Population and population growth

Several factors would determine the ability of the culture to receive elements from other cultures. This would include Technological superiority, perceived superiority, Allure or glitz, the ability of the element to provide solutions to problems, comparison with substitutes, its economy and cost-effectiveness, utility and practicality etc. The culture must be receptive enough to accept the new element, and it must fill in a void as well. This would lead to a cultural homogenization of sorts, but this process cannot continue beyond a certain point as individual cultural differences will prevail.

Cultural boundaries which will be useful in studying the process of socio-cultural change, may be setup based on linguistic boundaries, ethnic boundaries, political boundaries, quasi-political boundaries such as provinces, cultural areas, areas where a religion is practised, cultural area demarcation based on types of artefacts, or types of economic systems followed. Cultural boundaries must also be drawn up based on parameters such as ease of data collection, ease of comprehension, manageability and utility in downstream studies.

The process of cultural symbiosis takes place in several stages such as a generation of awareness of other cultures, establishment of direct or indirect contact, or allowing diffusion without contacts. A change in popular sentiment may also be a pre-requisite for change. The new element is then seeded through a push approach (pushed from an external source), a pull approach (driven by demand), a push-pull approach or through sub-conscious adoption. This would be followed by the acceptance of the element in a modified or an unmodified form followed by a process of internalization.

Changes may be adopted by elites (Top-down approach), may take place horizontally without regard to socio-economic status or other criteria, or may be initiated from the bottom of the pyramid in a few cases, or may spread by function, starting from education sector etc.

If change is brought in proactively, it involves steps such as awareness of other cultures, steps to overcome social inertia, setting the ball rolling and collecting feedback as necessary. Areas of

cultural lag based on socio-economic differentiation and geographical differentiation may also be identified for remediation.

Mind-orientation, Mind space and Cultural remediation

We had also proposed the theory of individual mind-orientation and mind space which could be one way of bringing about cultural remediation and cultural change. An individual may have a primary mind-orientation and several secondary mind-orientations. We see this as being vastly superior to the idea of personality which is not readily amenable to measurement of cultural change.⁸

There may be several types of mind-orientation, for example:

- Family orientation: In this case, the individual's efforts are primarily geared towards the satisfaction of familial needs.
- Societal Orientation: This type of Mind-orientation tends to put the well-being and needs of society above individual and all other needs.
- Employment or Business orientation: In this case, the individual's efforts are primarily geared towards employment of business. I.e. satisfaction of livelihood needs, and all other efforts are subservient to these.
- Individual mind-orientation: In this case, the individual tends to be self-centric in his pursuits. This type of orientation is characterized by a great emphasis or satisfaction of individual goals and aspirations.
- Religious, spiritual or philosophical orientation: In this case, a great deal of importance is placed on religious, spiritual or philosophical needs often at the expense of all other needs.
- Intellectual or creative orientation: In this type, a great deal of importance is placed on intellectual needs and creativity.
- Militant-orientation: In this type of orientation, individuals are geared to fight and protect society from external threats and forces. This type of mind-orientation may be more common in tribal and feudal societies.
- The Anarchist or the queer man: This type of mind-orientation may not be a bona fide category per se but a residual type and may be characterized by a partial or complete disorientation on some or many fronts.
- Other types of Basic mind-orientation: Other types of basic mind-orientation may also be defined with a proper justification, but most may be subservient to, and slotted into the above categories.

The idea of mind-orientation is very useful because it can prove to be a cog in the wheel in the development of country-specific economic models, and can help in the development of pedagogical techniques as well. Suitable remediation strategies can be developed after a relationship between various mind-orientations and economic performance is clearly established. Individuals mould their mind-orientations in accordance to the orientations of society, and changing societal orientations, can in turn bring about a change in individual mind-orientations.

We discussed the concept of 'mind space' which stems from the fact that every individual has limited time at his disposal, or limited bandwidth to focus on multiple issues. Thus, more time spent watching television means less time for other pursuits. This impacts aspects of people's lives such as reading skills, linguistic ability etc, and has many downstream implications. Mind

⁸ Strategies of Attitude changes, Robert Bandura, 1969

space may be bounded or non-bounded. For example time, spent on cultural pursuits may not be swapped for scientific pursuits. The cultural Anthropologist must keep this in mind during the process of cultural remediation, and this may have several downstream impacts such as pedagogy. Unlike personality studies, this can be modelled in fairly non-abstract terms and may be of great use in Anthropological studies.

This approach also defines thought worlds which are the mental processes in an individual. These can be analysed through interviews, questionnaires, projective techniques such as Thematic apperception tests etc, so that a multi-dimensional analysis is possible. Changing thought worlds will in turn impact mind space and bring about changes in individual and mind-orientation.

Cultural Remediation

Cultural remediation may be carried out after studying Cultural orientations or the orientations of a society, and we propose the Seven Cultural Orientations as described below. These are modal orientations, and there will always be outliers in terms of disparate groups and individuals:

Past-orientation versus future-orientation

Past-orientation versus Future-orientation is the relative emphasis placed by a society or culture on its past and its future. Future-orientation is associated with characteristics such as planning, foresight, personality development directly and with other characteristics such as individualism indirectly, and an over-emphasis on the past tends to neglect these attributes. Inward-looking cultures versus outward cultures

Some cultures are undoubtedly more outward-looking than others, and many have traditionally been so. This may also be referred to as the internal or external orientation of society. A change in a society's orientation will increase its cultural receptivity and lead to positive effects in society.

Rigid versus flexible cultures

Cultures can also be classified into rigid and flexible cultures. Flexible cultures are those with less cultural and intellectual baggage, and are more adaptable and flexible as a result.

Individualistic versus collective cultures

Some cultures like the USA may be more individualistic, while some others like the former communist countries emphasized collective thought and statism.

Material and non-material orientation

Some cultures like the USA may have placed more emphasis on materialism, while some other developed countries like Japan were much less materialistic. Other developing countries and least developed countries may be much less materialistic.

Contentment versus innovation

Some cultures do not wish to effect changes to the status quo, while some others pursue a relentless quest for perfection and changes in the status quo and this metric would indicate a culture's appetite for innovation

Rational-orientation versus Non Rational-orientation

In a rational society, less reliance is placed on myths, legends, superstitions etc, and rational societies tend to be much more progressive.

The Anthropologist may wish to slot different cultures into these categories so that they can be benchmarked with other cultures and steps taken for cultural remediation.

Applications of a Symbiotic study of Socio-cultural change

The following are the potential benefits and applications of a Symbiotic study of Socio cultural change:

1. Cultural analysis, predictive modelling and long-term cultural analysis

One of the key benefits of a Symbiotic approach to socio-cultural change is that it presents new tools that can be of great utility in any socio cultural analysis. This approach combines features of approaches such as unilinear models of cultural evolution, multilinear models of cultural evolution, historical particularism and culture and personality studies taking into account the circumstances of the Twenty-first century along with other all-new tools and techniques that we have discussed that can be of use in cultural analysis, cultural modelling and predictive analysis linked to a variety of remediation techniques.

2. As a guide to activists: where, when, what, how

This paper emphasises activism as a tool to speed up the process of socio-cultural change. We have also discussed some methods available at an Anthropologists disposal to bring about socio-cultural change. This approach can serve as a heuristic tool and guide the Anthropologist on where to focus his efforts at what time and by how much. Thus, the Anthropologist may focus his attention on major influencing cultures, wayward cultures or areas of cultural lag for a maximum return on time and money. Cultures that can be more readily accessed and those that are flexible to change must also be targeted for intensive focus, as this approach will result in maximum return on investment.

3. As a tool for theorization and ideation

This approach can be used as a tool for theorization and the formulation of general laws that can be used for any study across cultures. For example, religious beliefs may not change easily in most cultures. Changes to food habits too may change slowly, but faster than religious beliefs. These may be called 'Universals of Cultural change',

4. As a tool for corporate decision-making

This approach can be used in corporate decision making along with other decision-making techniques. The Cultural Anthropologist can provide the organization with valuable advice on the implication of globalization for the company. The Anthropologist may also highlight social issues that are relevant to corporate decision-making. The Anthropologist can help ratify marketing plans and forecasts and can also help prepare culture-specific plans. He can also help advice on the likely demand for the company's products on the basis of social and other data. These can be used in addition to methods already in vogue.

5. As a tool for economists to develop context-specific economic development models

This approach can be used as a tool for economists to develop context-specific economic development models on the basis of a study of mind-orientation and thought worlds. Thus, culture-specific mores and norms can be used to interface various formalist and substantive models for greater welfare and economic growth, adding new meaning to Developmental Anthropology or Anthropology in Development. This will help avoid the dangers associated with one-size-fits-all approaches. Similarly, dimensional analysis can help identify outliers and laggards for quick remedial action. Thus, aid can be targeted towards individuals or groups that are more in need of it, not those that are more accessible or enjoy more clout. This approach can also help investigate why some cultures are more rigid than others and suggest potential remedial measures. Furthermore, economic development must be linked not only to

a country's competitive advantage but to a society's cultural attributes. Thus, this approach can help lead to better economic welfare and faster economic growth. This is something only a Cultural Anthropologist is suitably equipped to do.

6. As a tool for Government departments and planning agencies

This approach can also serve as a tool to Government departments and planning agencies to help in economic planning activities by identifying outliers and laggards and performing a root cause analysis. The Cultural Anthropologist can also help formulate Culture-specific economic models and programs.

7. As a guide for donor and international agencies

This approach can also provide a guide to donor and international agencies to help them choose projects that provide the maximum return on investment with respect to a particular culture. This approach may help identify a list of people badly in need of developmental programmes. It can also provide a valuable guide to development conducive or change-unfriendly attitudes among different peoples in different communities. It can also identify if people of a particular community want change or not by providing a unique and a people-centric approach and perspective

8. As a guide for Social workers

There traditionally has been an interface between Cultural Anthropologists and social workers. Social workers need to understand not only social problems, but also cultural issues and the interface of a given culture with society at large. Thus, Cultural Anthropologists can provide general and specific inputs to different types of Social workers such as Public Health workers. The tools and techniques proposed here can take their endeavours to a much higher level. ⁹

9. Better interface between Cultural Anthropology and psychology

Psychologists have always investigated a range of topics such as personality development and behaviour. Social psychology, which is closely related to cultural anthropology, has also investigated man's behaviour in relation to his environment. Cultural Anthropologists have been interested in branches of psychology, but have largely kept personality structures constant to investigate variations in social structure. This exercise attempts to remediate the flaws of such an approach and provide a better integration between the two fields. ¹⁰

10. Research on the ethics of activism

This approach can be used as a platform for further research on the ethics of activism from an emic and a stakeholder perspective instead of imposing his own points of view. Activism can take on many forms such as Action Anthropology which a technique that combines research and activism. This approach was first popularized by the American Anthropologist Sol Tax..

Other uses and potential applications will present themselves with the passage of time greatly enriching the role of a Cultural Anthropologist, and provide him with new value and meaning.

⁹ Research Methods in the Social Sciences, David Nachimas and Chava Nachimas, St Martin's press, New York, 1976

¹⁰ Fundamentals of Social Psychology Robert A Baron et al Pearson 2012

Stakeholder Coordination in the Tokwe - Mukosi Disaster Response in Masvingo Province, Zimbabwe

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ABSTRACT

Physical displacement and natural disasters have occurred in Zimbabwe since pre-independence times, always posing a threat to human life and developmental gains. Disasters in the form of flooding continuously contribute to loss in human lives, destruction of shelter, damage to household assets and in internal displacement. In 2014, a combination of high rainfall and damages on the Tokwe-Mukosi dam wall contributed to flooding of communities in close proximity to the dam. The disastrous outcome was the flooding of the immediate catchment area which communities were unable to cope with. The government sought for assistance from disaster management actors during and after the flood with mixed response. This paper explores roles played by stakeholders in responding to flooding of Tokwe-Mukosi dam in Masvingo Province. Data for this paper was collected through structured interviews, observations and focus group discussions. Relying on 'habitus' and 'pastoral power' as conceptual tools, the paper broadly found out that communities resorted to various reservoirs of knowledge and experience to limit their post-disaster vulnerabilities while also demonstrating abilities to negotiate various power structures. Finally, the paper recommends that the interventions from various agencies recognise the agency of displaced actors in attempting to alleviate challenges. In addition, researchers ought to equally embrace more innovative methods and conceptual lens when exploring social phenomena in order to go beyond narrow narrative approaches and developmentalist discourses.

Keywords: disaster, displacement, Flood, habitus, pastoral power, Zimbabwe

DISPLACEMENT/HUMAN MOBILITY INDUCED BY FLOODING

Disasters can cause displacement of individuals, households and communities. Hydro-meteorological disasters such as flooding have in the past decade affected a number of communities in both rural and urban areas of Zimbabwe. Many rural settlements situated in flood prone areas such as valleys and in close proximity to dams and rivers have suffered the most from impacts of flooding. Increased poverty in rural communities have also increased vulnerability to disasters in these communities. The reason for this is that most households in the rural areas live in traditional houses made of pole and clay/mud which are easily destroyed by flooding and at times by heavy rains, causing displacement temporarily or permanently. With regard to the disaster which occurred in Tokwe-Mukosi, rising water level and spillage from Tokwe-Mukosi dam caught communities near the dam off guard. Due to the severity of the flooding which affected households in Masvingo and Chivi districts, the government decided to relocate the affected households to Chingwizi area located in Mwenenzi district. This paper presents findings on a case study carried out on households that were displaced by flooding of the Tokwe-Mukosi dam in Zimbabwe. Data collection was done through structured interviews, discussions with affected households and observations. While the literature review highlights the litany of studies and reports which emerged in the immediate aftermath of the disaster (among them Oxfam, 2014; Tarisayi, 2014a; Tarisayi, 2014b; Tarisayi, 2015), the

publications are of remarkably limited analytical diversity, mostly assuming a narrative tone or employing developmentalist and political economy frames. This study employs a conceptually different approach, relying on habitus and pastoral power to read the (dis)coordination among stakeholders during the crisis. Such an approach is useful in revealing the power shifts which played out during the crisis as well as the historical antecedents upon which such shifts emerged.

LITERATURE REVIEW

Human displacement

Human mobility is not always a voluntary process. Quite often, it is not a process merely characterised by movement of bodies from one place to another. Instead, there are instances where people are uprooted from their places of normal residence or livelihood by human and/or natural forces resulting in a complete shift in outlook for those affected. In such cases, the concept of displacement is more useful as a discursive and analytical tool. Displacement has connotations of being out of place or in the wrong place (Hamber, et al., 2015). It therefore moves away from mere push-pull binaries of migration by placing salience on the importance of place and livelihoods to the displaced. The connectedness of persons to spaces and places is important because it allows for a look into livelihoods as well as lives of people in relation to places. Displacement therefore enables researchers to identify vulnerabilities caused by forced movement. Such vulnerabilities based on age, gender, academic profile, social status and so forth have been recognised in a study on the post-tsunami era in Indonesia (Gray, et al., 2014). Not only does displacement have an immediate disruptive effect on livelihoods and incomes but it may influence fertility (National Research Council, 2004). Furthermore, people can be displaced in place as happened in Zimbabwe (Magaramombe, 2010). Being displaced in place presents a notion that connection with a place may exist in physical form despite the creation of new ruptures which deny people certain forms of intimacy with the places.

Zimbabwe's history of displacement

Zimbabwe has experienced various forms of displacement particularly in relation to resources (Muzondidya, 2007). Perhaps the most widespread and lasting displacement so far has been related to land. A detailed discussion of the historical antecedents is beyond the scope of this paper (for detailed discussions in pre and post-colonial Zimbabwe, see: Jennings & Huggins, 1935; Thomas, 2003; Moyo & Yeros, 2011). However, noteworthy is the fact that Africans were displaced from fertile to various parts of the country where soils were of poorer quality. Within this politics of displacement is displacement for the purposes of large infrastructure projects. Kariba dam is situated along the Zambezi River which borders Zimbabwe and Zambia in the northern part of Zimbabwe is arguably the most symbolic of mass human displacement. At the time of construction, the dam was financed by the World Bank through the largest loan (Bond & Manyanya, 2002). In order for the dam to be constructed, there was 'forced involuntary resettlement of 57,000 people within the reservoir basin and immediately downstream from the dam' (Scudder, 2005). These displaced communities have continued to live precariously in areas which are hardly adequate for agricultural activity, a situation which most likely compromises their rural livelihoods. Associated with such forms of displacement are contemporary forms of violent and coercive displacement through such experiences as land reform (Muzondidya, 2007; Hammar, 2008), operation restore order (Tibaijuka, 2005) and politically-motivated ruptures in the post 2000 era (see for example: Hammar, 2017). It is with this background that the Tokwe Mukosi becomes part of a broader history of displacement and forms a useful site to deploy Bourdieu's concept of Habitus. Moreover, government intransigence as well as stakeholder roles in alleviating the suffering allows for a fertile ground on which to test power relations through Foucault's concept of pastoral power.

The Tokwe Mukosi Disaster

The disaster that is under review was a result of a confluence of factors which were both human-induced and natural. In January/ February 2014 received 850 mm of rainfall which is double its usual rainfall (Tarisayi, 2014a). some of this rainfall collected in rivers which flow into the Tokwe Mukosi dam, leading to a large stock of water in the water body which at the time was still under construction. What transpired after that is the subject of speculation and intense debate. On one hand some critics suggest that a deliberate exercise to displace communities ensued through release of water from the dam into the surrounding catchment area where obdurate villagers who had been told to evacuate remained (HRW, 2015; Newsday, 2015). On the other are counterclaims primarily from the state that the disaster was caused by excessive rains. With little more information than news articles and speculative 'analyses' the truth is uncertain to verify. What is clear however is that the sequence of events that unfolded culminated in a disaster. "After the government declared the flooding a national disaster, an estimate of at least 2 700 families with an average size of 4,5 people per household¹ were evacuated from Chivi South to Chingwizi relocation site of Nuanetsi Ranch in Mwenze District. Verification with other stakeholders indicates a possibility of a higher number of families evacuated reaching up to 6 393 families."² (ZHRC, 2014, p.)

In the aftermath of the Tokwe-Mukosi disaster a litany of studies ensued, and these have been summed up in 'a consolidated analysis of [the] various perspectives on the Tokwe-Mukosi floods' (Tarisayi, 2015). Although the discussion by Tarisayi is 'consolidated', it aggregates the existing development literature which is concerned with livelihoods, human rights frameworks, development impacts and disaster risk-reduction/management. The utility of these normative approaches lies in revealing shortcomings on the part of development agents, duty-bearers, risk agents and so forth. This creates the impression that the shortcomings were largely deficient on the supply side and therefore absolves displaced communities from any fault despite government's claims that villagers had been given ample time to evacuate from the area (see: VOA, 2014). In contrast, some analyses employ political economy lens which is constructed around the politics of displacement. In this narrative, similar tones to other contemporary episodes of displacement which have transpired in Zimbabwe emerge (see: Hammar, 2008; Hammar & Rodgers, 2008) largely detailing the diverse political actors and ramifications of (in)actions. Among such pieces of scholarship is Mediel Hove (2016)'s discussion of state-community relations which rendered displaced communities victims. To sum up the argument laid out by Hove (2016), while floods were a bane for communities in Chivi district where Tokwe-Mukosi dam is situated, the government of Zimbabwe compounded the situation by failing to provide support and resources in the aftermath of the disaster. Support for this strand of thought is available in the form of multiple reports from local newspapers and international non-governmental organizations (iNGOs). For example, ZHRC (2014) notes that many shortcomings prevailed for the internally displaced persons relocated to Chingwizi relocation site after communities were evacuated by the state agencies. Although both the political economy and developmentalist perspectives are useful in illuminating some perspectives on the disaster, as the following section details, the perspectives are narrow and do not reveal the nuances which permeated the disaster and its aftermath. In order to draw out such nuances, a different conceptual lens from the perspectives in the literature is offered and

¹Census Preliminary Report 2012 ZIMSTAT, available at <http://www.zimstat.co.zw/dmdocuments/CensusPreliminary2012.pdf>.

²Ministerial Statement on the Tokwe/ Mukosi Disaster by the Minister of Local Government, Public Works and National Housing (Dr Chombo), available at http://www.parlzim.gov.zw/attachments/article/35/13_February_2014_23-35.pdf.

applied through a case analysis of communities in the affected area. It is to this innovative fusion of conceptual frames that the paper turns its attention.

CONCEPTUAL FRAMEWORK

The literature review section outlined the diverse prisms through which analyses on displacement and forced mobility have formed around the Tokwe-Mukosi disaster. In this section, we detail the alternative frames which are deployed in this paper to provide a different analytical perspective on the dynamics and aftermath of the disaster. There are two concepts which form the bedrock of the study namely Pierre Bourdieu's habitus and Michel Foucault's pastoral power.

Foucault (1982) lays out his discussion of pastoral power within the context of religious organizations. However, the concept also finds utility within broader social and institutional frames because of its portrayal as one dimension of many shades of power -discipline, and biopower being others (Bevir, 1999). Outside of the religious field, pastoral power is useful as an analytical tool and this has been presented as follows:

Finally, the modern state has also adopted the pastoral techniques of government that originally developed within the Church. Pastoral power requires individuals to internalize various ideals and norms so that they both regard an external body as concerned with their good and strive to regulate themselves in accord with the dictates of the external body. The secularization of pastoral power involved the state replacing the spiritual end of salvation with worldly ends such as health and well-being (Bevir, 1999, p.351).

But what exactly is this malleable form of power which is manifest in various contexts? Foucault (1982) outlines pastoral power as a power technique which originated in Christian institutions with the following qualities:

1. It is a form of power whose ultimate aim is to assure individual salvation in the next world.
2. Pastoral power is not merely a form of power which commands; it must also be prepared to sacrifice itself for the life and salvation of the flock. Therefore, it is different from royal power which demands a sacrifice from its subjects to save the throne.
3. It is a form of power which does not look after just the whole community but each individual in particular during his entire life.
4. Finally, this form of power cannot be exercised without knowing the inside of people's minds, without exploring their souls, without making them reveal their innermost secrets. It implies a knowledge of the conscience and an ability to direct it (p.783).

Reading from these qualities, it is evident that some modifications are expected once the power is read from a setting which is anomalous to religion. For instance, in quasi-democratic political settings one would hardly expect that pastoral power be concerned with assuring individual salvation in the next world but more probably immediate appeasement of the electorate for the next electoral cycle. Similar modifications apply on the other features laid out by Foucault. Such adjustments, in order to facilitate analytic convenience, have to be made cautiously due to the elaborate manner in which Foucault himself laid out the forms and character of pastoral power in contradistinction to political power. Hence, it must be borne in mind that pastoral power is salvation-oriented, ablative, individualizing and linked to the production of truth (p.783). Indeed, some scholars suggest that Foucault contention was that the historical foundations of present practices of state-based governmentality were partly to be found in the pre-Christian East, and then later in the Christian East, in the model and organization of a pastoral type of power (Golder, 2007, p.165). However, despite these subtle

differences, institutional change within religious organizations as meant that they increasingly resemble secular entities in terms of architecture (Foucault, 1982). The near similarity suggests that there remains a disconnect between the theory and secular institutions including those in putatively advanced western states (Golder, 2007).

Although pastoral power shows the workings of power between various actors in a relationship which is already structured into dominant-subject form, it does not reveal how such power has been learnt or formed. Moreover, it leads to a phenomenological reading of relations, that is, enables us to understand local power and agency through the experiences encountered during the disaster. Such a reading leaves out the structural influences which shaped relations between communities and those organizations which assisted during the Tokwe-Mukosi disaster. To bridge this gap, Bourdieu's concept of Habitus is deployed. Bourdieu (1977) indicates that the social world may be the object of three modes of theoretical knowledge which are either objectivist, phenomenological or a combination of both. In offering the third possibility which he calls the habitus, Bourdieu concedes that what we know can be derived from both structural systems and experience. Habitus in his words refers to:

systems of durable, transposable dispositions/ structured structures predisposed to function as structuring structures, that is, as principles of the generation and structuring of practices and representations which can be objectively "regulated" and "regular" without in any way being the product of obedience to rules, objectively adapted to their goals without presupposing a conscious aiming at ends or an express mastery of the operations necessary to attain them and, being all this, collectively orchestrated without being the product of the orchestrating action of a conductor (Bourdieu, 1977, p.72).

The habitus is 'a set of *dispositions* [emphasis in the original] which incline agents to act and react in certain ways' (Bourdieu, 1991). Alternatively, it can be read as 'socially acquired tendencies or predispositions that serve as a "matrix of perceptions, appreciations, and actions," causing individuals to view the world in a particular way' (Bourdieu 1991 cited in Bonilla-Silva, Goar and Emerick, 2006, p. 233). Habitus allows us to understand how communities have learnt how to engage with agents which they deem powerful (government and civil society) in an attempt to reconstruct their lives in post-disaster situations such as the Tokwe-Mukosi disaster. In the process, we see how communities have formed resilience and networks of resilience after the withdrawal of most supporting organizations. Within the arena of displacement research, habitus has been used as a useful conceptual tool in reading lives of internally displaced people in northern Uganda (Rosenoff, 2010). In such a context, the question on how young people acquire culturally-engrained dispositions emerges. Given a history of war and displacement which has seen familial structures disrupted Rosenoff (2010) wonders how young people develop culturally appropriate knowledges relevant for their daily lives. By the same token, habitus reveals to us the approaches and strategies which communities from Tokwe Mukosi deployed in an effort to engage with development and relief agencies. With many organizations such as World Food Programme and CARE international already active in the area as well as politicians, certain dispositions are assumed to have been learnt and it is these that we seek to explore.

METHODOLOGY

Employing a qualitative approach to explore the roles played by various stakeholders during and in the aftermath of the Tokwe-Mukosi disaster, the study relied on a survey which was conducted between the months of December 2017 and June 2018 in Chivi district in three phases sequenced as follows:

1. The first phase entailed interviews and a focus group discussion with families in Chingwizi resettlement area.
2. The second phase stemmed from referrals in the first stage, resulting in interviews with formerly displaced families who had migrated away from Chingwizi resettlement area to other parts in Chivi district.
3. The third phase constituted key informant interviews with organizations which had been part of the intervening parties and Inter Agency Standing Committee.

Although the starting point was Chingwizi resettlement area in Mwenenzi District, the study spread out to parts of Chivi district where some displaced families have since dispersed. A purposive sampling frame was employed in Chingwizi for a general survey involving household heads ($n=16$) and among organisations for key participant interviews ($n=5$) while snowball sampling was relied on in tracing those families which had migrated from the official relocation site ($n=7$). Purposive sampling involves a deliberate selection of 'the sample in relation to some criteria, which are considered important for the particular study' (Singh, 2006, p.91). Hence participants who are now in Chingwizi who are known to have been rescued from the disaster were approached while a selection of organizations which had been part of the relief and support efforts after relocations. Identifying organizations was through the reports made particularly the report by Kudzatsa (2014) which identified intervening organizations and other stakeholders such as CARE International, Action Contre la Faim (ACF), Save the Children, Plan International, Catholic Relief Services (CRS), District Development Fund (DDF), Food and Agricultural Organization (FAO), International Organization on Migration (IOM), United Nation Development Programme (UNDP), United Nations Children's Fund (UNICEF) and United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

The participants who migrated from Chingwizi and relocated in other parts within Chivi District were recruited using the snowball method whereby a participant referred other potential participants to the study (Patton, 2002). To start off the snowball, participants in phase one of the study were asked about any displaced families which had migrated to other parts of Chivi district. Where such families were known to a participant, contact was made soliciting their consent to also participate.

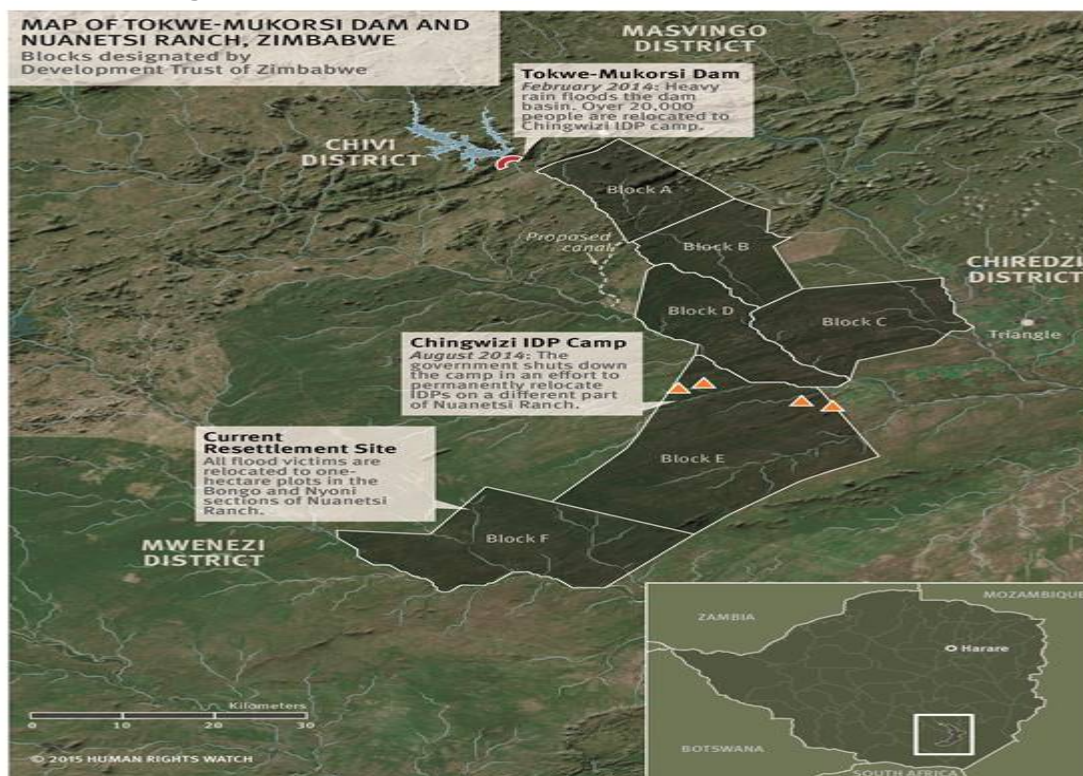
To gain a firm grasp of experiences, attitudes and perceptions of various stakeholders, research instruments used were diverse. Instruments included semi-structured questionnaires, observations and focus group discussions. In using such a variety of instruments by way of triangulation, the concern was on ensuring data validity at data collection stage. The concept of triangulation assumes that any bias inherent in a particular data source, investigator and method would be neutralized when used in conjunction with other data sources, investigator and methods. Observations are chosen for a number of merits which they offer; these include '(i) the researcher is enabled to record the natural behavior of the group. (ii) The researcher can even gather information which could not easily be obtained if he observes in a disinterested fashion. (iii) The researcher can even verify the truth of statements made by informants in the context of a questionnaire or a schedule' (Kothari, 2004, p.97). Group discussions were adopted because groups 'may be better able to reveal the intensity of feelings, thus facilitating comparisons among different positions' (Corbetta 2003, p.276).

THE SITE

Chivi District is subdivided into Chivi North, Chivi Central and Chivi South. It lies within Masvingo province in the southern part of Zimbabwe. Within this area lies the Chingwizi

camp/relocation site which has since been disbanded and Chingwizi resettlement area. A map of the area which was directly connected with the disaster is provided in Figure 1 below.

Figure 2: Tokwe-Mukosi dam and Areas of new Settlement



Source: HRW (2015)

Tokwe Mukosi is a dam which at the time of its construction in 2014 was touted to become the biggest inland dam in the country with a capacity of 1.8 billion cubic meters capable of generating between 15 and 50 megawatts of electricity, and 15 megawatts are adequate to light up the Masvingo province as a whole (Hove, 2016, p.2).

STUDY FINDINGS

The study findings are presented in thematic form following the three broad issues post-disaster displacement, power contests and strategies of communities. However, before detailing the themes, a snapshot of participant characteristics is laid out.

Demographic profile of participants

The demographic profile of participants is presented in Table 1 below.

Table 10: Description of study participants

Element	Measure
Key Informants (n=5)	2 NGO-employed Field Officers
	1 Ward Councillor
	1 NGO regional officer
Households (n=23)	Average size 5.3
	Average age = 47.6 years
	Gender = (43% Male;57% Female)
	Area of domicile (Resettlement site = 70%; Outside resettlement site = 30%)

Twenty-three household heads took part in the study with sixteen (16) taking part in the survey at Chingwizi resettlement area and seven (7) forming the snowball group. All participants providing data in these phases were household heads. A total of five (5) key informants representing local politicians and non-governmental organisations took part in interviews.

Displacement after the disaster

Our entry point was on discussing displacement after the disaster. Doing this allowed us to avoid the contentious issues of causality and instead pay attention to what the process of mobility entailed, and which actors were involved. In addition, it enabled us to focus on displacement even after resettlement. All the households (23) indicated that they resided within the vicinity of Tokwe-Mukosi dam with estimates ranging from within 200 metres to 800 metres away. Through discussions, it emerged that four (4) of the families had previously been displaced after they relocated from a part of the area which the current dam has since submerged. This brings out an element of successive displacements and more importantly from our chosen theoretical lens, hints at habitus. After the disaster at Tokwe-Mukosi, a multi-pronged response emerged with various NGOs contributing in various ways towards relief. However, there was a common perception (70% of respondents) that assistance was delayed from NGOs and even worse from government. Such a perception was dismissed by the local councillor who indicated that through the civil protection unit and the Zimbabwe National Army, the government had been at the forefront of assisting communities during and immediately after the disaster. While in Chingwizi, livelihoods were precarious and the support from NGOs and the state gradually petered away resulting in resettlement to Chingwizi resettlement area. Seven (7) families are among a host of others who opted to find alternative places of residence, moving to different parts of Chivi South District. This once again draws out the recurrent theme of successive mobilities. Reasons for relocating away from the resettlement area included creating distance from political controls (2), seeking grazing land for livestock (4) as well as seeking more agricultural land (4), all factors whose limitations and manifestations are addressed by Mutopo (2011) in her gendered analysis of Chingwizi village.

Power contests

Participants identified various organisations with whom they engaged during the disaster and its aftermath. Some of the organizations identified included FAO, IOM, UNHCR and UNICEF among others. Of interest for the study was the perception of how these organizations interacted with communities and through a reading of such perceptions, identifying the power relations. Two critical issues emerged from the discussions held as well as key informant interviews. The first is that power relations were not always fixed although by and large power was skewed in favour of development and relief agents. The second was that even when fluid, power relations manifest differently in various sectors.

Communities, by virtue of being displaced and in need of material support tended to be power-deficient victims in the relations they had with NGOs and state agencies. For a start, they needed to find new places or residence/shelter. The rains did not desist from falling due to floods on the ground but continued even as relocations ensued. As a result, communities were in a poor bargaining position over the matter of which place they were relocated to. Associated with this position and compounding to the woes of communities is the fact that they were evacuated from one place to another, in most cases with meagre assets. As a result, the ability to negotiate space to occupy or even mode of mobility was very limited. For example, Charlieⁱ whose homestead was near the dam indicated that he owned five cattle, an ox-drawn cart, goats and few other farms implements prior to the displacement of 2014. However, all his

livestock perished as a result of the floods and the few implements which he salvaged were either sold off or:

“of very little use as a result of poor implementation condition” (Charlie, 12/12/2017)

The second power dynamic relates to different forms of visibility of power across various sectors. To persist with Charlie's experience, although his leverage was diminished over matters over such as where to locate, he was not entirely powerless because he maintained a claim on agency over what he did *after* relocation. The collective result of this awareness over agency is best portrayed in an incident which was covered in the media (see: Moyo, 2014) and was corroborated in discussions held during the study. Power positions shifted with communities attempting -often with minimal success- to exert their own influence on proceedings. Hence Mashaireⁱⁱ reflects on how together with other displaced family heads they resisted efforts to have then resettle in Chingwizi resettlement area, opting instead to move from the temporary camp to a part of Chivi South District. Having been assisted to move from their original homes to Chingwizi camp, the proposition to move further to the resettlement site was met with resistance from some families. This resistance emerged under conditions of increasing discontent over dwindling supplies and support as well as perceived government neglect of communities.

Strategies of communities

The immediate post-disaster period was characterised by dependence on the support systems provided by NGOs. However, once communities had settled down in the camp, various strategies were deployed to engage with fellow members, NGOs as well as politicians at both local and national level. The strategies can be classified into two groups, namely proactive and reactive. Proactive strategies were those initiated by communities to further a specific cause or position while reactive strategies were responses to given scenarios. Examples given in our study included detailing the community's plight through various media platforms, convening informal meetings with camp authorities, visible demonstrations of hostility and cooperative work.

Cooperative work arose from within the displaced community which decided to use their meagre resources to form cooperatives where garden projects were adopted. Seeing these efforts, other NGOs then sought supplementary resources to be used within the projects. In contrast to the cooperative work strategy was the use of the crisis to portray various ills and inadequacies through media platforms. The partisan media in Zimbabwe was used by communities to portray the harsh conditions which they faced. Outlets such as Newsday, The Zimbabwe Independent and Financial Gazette were openly engaged to raise issues bedeviling communities. The state-owned outlets were treated with ambivalence presumably because of their taciturn approach at covering the disaster as one which occurred under government's watch. Other media platforms were also relied upon including reports from non-state actors. The general approach here was that community representatives and members would make efforts to make their voices heard and their presence felt. Within the camp itself, the community engaged in informal meetings which in some instances compelled officials to attend. The visibility of such meetings was held with circumspection by officials who were wary of a potentially volatile environment. As a result, when meetings were held, officials would attend, and this led to the communication of many grievances. Lastly, on at least one occasion, a loosely-structured demonstration was held which although short-lived, helped to heighten the urgency of concerns which community members had raised. With local politicians barred from addressing the communities, the demonstration was meant to be a clear message that the political elite had no support or sympathy among part of the camp's population.

A clear strategy which some families engaged in was relocating from the camp to other parts of the country. The study only focused on those who migrated to other parts of Chivi District, but the migration stretched beyond this geographic area. Moving away from the designated areas was not merely an exercise in choice but a demonstration of defiance by the families. With one of the families in our study having been subjected to two “relocations”, frustration with officials and a desire to move away from highly politicised areas proved to be useful motivators. Having noted and observed these issues in the data collection phase, the dominant question which emerges for the purposes of our study was ‘what do the findings mean?’ both practically and theoretically. To make sense of our findings, we discuss them considering our conceptual framework.

DISCUSSION

To start off the discussion, a recap of the conceptual framework is due. Both Bourdieu’s concept of habitus and Foucault’s pastoral power were deployed in reading the knowledge and power dynamics from the Tokwe-Mukosi disaster. To sum it up, how did communities know what strategies to deploy against and to various stakeholders? Furthermore, what were the shifts in power between parties involved?

Habitus gives us a way of conceiving how communities in the study ‘knew that they know’. Habitus is ‘a set of *dispositions* which incline agents to act and react in certain ways’ (Bourdieu, 1991). From this perspective, there are presumably some learnt or observed dispositions which communities in our study had and these dispositions informed them on how they engaged with various stakeholders. The use of media platforms, community meetings, garden initiatives as well as demonstrations were all tools which community members have prior experience in or knowledge of. With some members having been previously displaced and neglected, their consciousness of the pressure areas to focus on was already engrained. Furthermore, given the presence of NGOs in the area prior to the disaster, communities were already aware of what thematic areas NGOs offer support in. Seeing communities in this light reveals that far from being recipients of support from NGOs and the state as much of the developmentalist literature on Tokwe-mukosi disaster has shown, communities manufactured opportunities by harnessing previously acquired stocks of knowledge. In other words, they knew what worked and resorted to these techniques to ensure that their plight was addressed. Where such attempts failed or proved inadequate, the private media which is wont to critically examine government was turned to.

Families with prior experience of displacement were quick to opt out of resettlement to the Chingwizi resettlement site, opting instead to move to other zones in an effort to avoid congestion and government control. In her study presented at an international conference on land grabs in 2011, Patience Mutopo (2011) recognizes the role played by government in issuing land as well as controlling the Chingwizi village which is situated in Nuanetsi ranch. The problem which emerges is that displaced farmers from the Tokwe-Mukosi disaster of 2014 had become accustomed to living free of government’s eye and therefore were presumably wary of residing and engaging in livelihoods under controlled conditions.

Adding to this layer of analysis, Foucault offers us the concept of pastoral power. Pastoral power is a form of power with origins in the Christian church but also manifest in politics which is salvation-oriented, ablative, individualizing and linked to the production of truth (Foucault, 1982). There are various stakeholders through whom power dynamics can be read in the Tokwe-Mukosi disaster. However, considering that we have laid out our reading of pastoral power within the realm of politics, our discussion is confined to this field. Local politicians who include councillors, the local member of parliament, the provincial governor

and a cabinet minister were treated with disdain. In return, they distanced themselves from engaging with communities particularly in the initial phases. A vacuum emerged where power was up for negotiation. While rejecting the formal authorities, the local community did not manage to garner sufficient political power and relied on support of NGOs and a hostile media. From this perspective, the qualities of pastoral power which Foucault outlines were largely deficient. As laid out in the introductory section, NGO presence was visible from the onset, demonstrating greater intimacy with the plight of the displaced people. This coupled with the fact that the production of a consensual/universal truth over what transpired reveals a gap in the role of government. Thus, while the government has various structures across the country, it is striking that when it came to engage affected communities over the disaster, there was distance, contestation over truth, tension and a solution which was not wholly appreciated. Conversely, the community was initially dependent but increasingly became assertive in its demands and its strategies. The power structure was thus checked for a period during and after the crisis. Evidently, power is not fixed but ebbs and flows between parties depending on the prevailing conditions. Moreover, although the state may have semblances of pastoral power across vast swathes of the country, context shapes how pronounced such power is – as the Tokwe-Mukosi situation has demonstrated.

CONCLUSIONS AND RECOMMENDATIONS

The paper has discussed the post-disaster situation which displaced communities negotiated after the Tokwe-Mukosi disaster of 2014. It has avoided the debates on causes of the disaster to shy away from the largely legalistic and developmentalist frames which many studies have employed (Oxfam, 2014; Tarisayi, 2014a; Tarisayi, 2014b; Tarisayi, 2015). Michel Foucault's pastoral power and Pierre Bourdieu's Habitus were relied upon as conceptual frames. The concepts address the resources which communities relied on in dealing with actors such as local politicians and NGOs as well as the power dynamics which played out between communities and these actors. The study has revealed that communities harnessed previously acquired stocks of knowledge to inform how they related to other stakeholders. In addition, they were not entirely powerless during the disaster but engaged in shifting contests of power with local communities. The study has thus shed new light on the plight and tact of communities which contrasts with the helpless image portrayed in news articles and some NGO reports. Communities were alert to various possibilities to respond to their plight through media positioning, self-help cooperatives and other initiatives. From the findings, the study makes three recommendations as follows:

1. The first recommendation pertains to the use of more innovative approaches in studies on displacement, human development and disaster and risk management. As noted in the review of literature, studies have tended to rely on narrow theoretical and conceptual frames and therefore novel theoretical and conceptual prisms are due to reveal nuances which evade human rights, legalistic, developmentalist discourses.
2. The study recommends that the government recognises that communities do exercise agency over their lives even where their plight is dire. Responses made in such contexts therefore ought to embrace this reality to avoid creating vacuums and heighten tensions.
3. NGOs need to be versatile in their analyses and operations. This implies a preparedness to shift from developmentalism as a solution to problems, to embracing socially situated responses which accept local solutions despite apparent power deficiencies. Even vulnerable communities can solve some of their problems or challenges as is evidenced by some of the strategies deployed by Tokwe-Mukosi victims. In making this suggestion, the study is not suggesting that NGOs refrain from providing support, but that the support be moulded with local contexts and dynamics in mind.

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ⁱ All names mentioned here are pseudonyms in line with ethical protocols in social science research where details on personal identities are sensitive matters.

ⁱⁱ Refer to note 'i' above.

Cooperative Federalism and Policy Implementation: The Children's Health Insurance Program for the Latino Population

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ABSTRACT

With ongoing debates in Washington about the proper role of government in the provision of health care, especially during tight fiscal times, this paper examines current federal-state relations on the implementation of the Children's Health Insurance Program. The paper focuses specifically on the cooperative nature of the relationship between federal and state governments with regards to insuring low-income, uninsured Latino children. While the cooperative nature will continue, program implementation will be difficult to maintain in the future because of the uncertainties of resources provided to the states, commitment of political leaders to the program's goals, the complexity of joint action involved, and the diversity of the Latino population. The theoretical framework, program context, and findings of this research are specifically discussed.

Key Words: Federalism, Cooperative Federalism, Policy Implementation, Children's Health Insurance Program

INTRODUCTION

Among many public health issues facing the U.S. population is the enduring need to care for uninsured children in low-income families. According to the Kaiser Family Foundation (2011), 8 million children remain uninsured, including 5 million who are eligible for Medicaid and the Children's Health Insurance Program (CHIP) but not enrolled (Key Facts, February 2011). As the U.S. economy recovers from the devastating effects of the economic downturn also known as the "Great Recession," low-income parents have relied more on public health insurance coverage as a means to cover their dependent children. As many low-income parents have lost their jobs along with private health coverage, CHIP has been effective in providing access to children who would otherwise go without such care.

In spite of federal and state success in expanding health coverage to uninsured children, more action is needed to reach those who have no health coverage, particularly those belonging to the Latino community. Many of the uninsured belong to families where parents are unaware of CHIP, which makes public awareness and outreach important in reaching these groups. Statistics compiled by the U.S. Census Bureau clearly show a growing Latino population throughout the U.S. making it the largest and fastest growing minority group. One could argue that this growing community presents a challenge for intergovernmental actors to be more responsive to their public health needs. In this context, this paper explores the cooperative federalism framework to support the success of CHIP and the issue that impede program effectiveness of CHIP based on the policy implementation framework.

GROWING LATINO POPULATION

Health insurance coverage is important for all American children, especially those of Latino families. According to the U.S. Census projections, Latinos are the largest and fastest growing minority group in the U.S. making up 15% of the population (see figure 1).

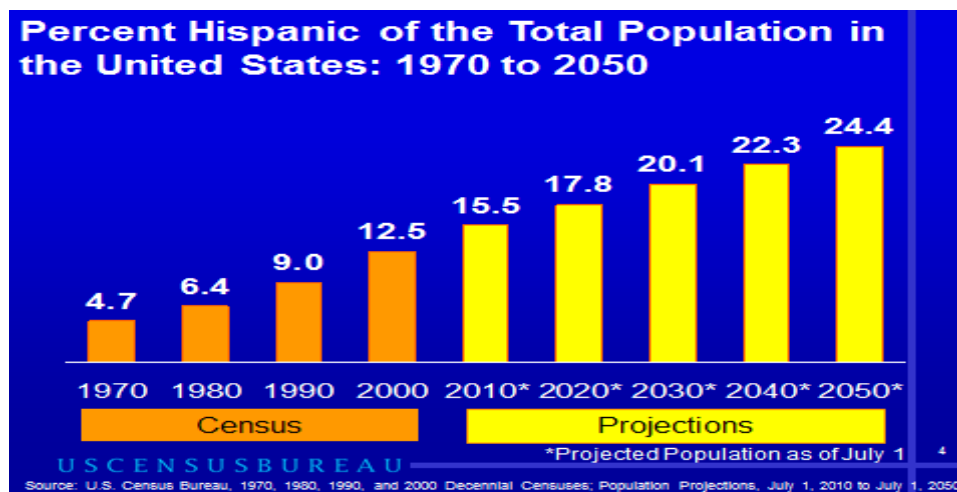


Figure 1: U.S. Census Bureau, Percent Hispanic of the Total Population in the United States: 1970 to 2050.

This problem is even more pronounced among Latino children ages 0-19. According to the U.S. Census report, there is a disproportionate lack of health insurance as Hispanics were less likely to be covered by health insurance than non-Hispanic Whites (U.S. Census Bureau, 2001). Research shows that the majority of uninsured children (65%) live in families with at least one full-time worker and these families are not offered coverage by an employer or cannot afford the premiums (Key Facts, 2011). Although the rate of uninsured children varies by state, the rate is 15% in four states in the U.S. (FL, NM, NV, TX) and all uninsured children account for 36% in five states (CA, FL, GA, NY, TX), four of which are the four largest states in the nation (Key Facts, February 2011). It is imperative to enroll eligible low-income children to assure coverage for all of America's children.

CHILDREN'S HEALTH INSURANCE PROGRAM

Policymakers and implementors in present-day intergovernmental relations have continued to grapple with the important public policy issues. According to Conlan and Posner (2008), the dominant issues in intergovernmental relations will continue to range from taxation, health care, and federal-state support for entitlement programs, including Medicare services to the elderly and Medicaid services for low-income individuals and the poor. This is most notable with the public provision of health insurance through the Children's Health Insurance Program (CHIP). Passage of CHIP was a bi-partisan effort in the wake of President Clinton's defeat of health care reform efforts during 1994.

Dubay and Kenney (2009) note that passage of CHIP was an unprecedented effort aimed at reaching and enrolling uninsured children in public coverage (Dubay and Kenney, 2009, 2042). Recognizing the importance of addressing this issue, Congress created the Children's Health Insurance Program (CHIP) (Public Law 105-33). Passed as part of the Balanced Budget Act of 1997, the program sought to complement Medicaid coverage to low-income uninsured children who were not eligible for Medicaid. The federal government matches state spending for both Medicaid and CHIP and the rate at which the government matches CHIP spending is higher relative to Medicaid (Key Facts, February 2011). CHIP matching funds to support states' efforts to provide health coverage through their State Children's Health Insurance Programs (SCHIP) or Medicaid programs for children ages 0-19 (Key Facts, February 2011). Broaddus

(2011) notes that aggregate federal funding for state CHIP programs was set at levels that were more than adequate to meet states' financing needs during CHIP's first ten years (Broaddus, 2011, 2). CHIP is administered by state governments but is jointly funded by the federal government and states.

Congress has enacted several key laws that provide additional resources to CHIP. Among the laws are: The American Recovery and Reinvestment Act of 2009; and the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009. According to the Centers for Medicaid and Medicare Services (Department of Health and Human Services, Centers for Medicare and Medicaid Services, 2010), the 2009 American Recovery and Reinvestment Act (ARRA), also known as the Stimulus, provides financial incentives to states health providers who "adopt, implement, upgrade, or meaningfully use certified Electronic Health Records (CMS 2010).

According to the Department of Health and Human Services (2010), the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 provides for performance bonuses to states who have demonstrated that they can reduce the administrative burden of enrolling eligible children in CHIP and SCHIP programs; automatic eligibility of children whose mothers currently enjoy Medicaid; \$10 million for a national outreach campaign; \$10 million in grants to Indian Tribes, Indian Health Services providers, and other tribal health care providers, and \$80 million in grants to promote enrollment and retention in Medicaid and CHIP. Furthermore, the Department of Health and Human Services notes that the 2010 Patient Protection and Affordable Care Act provides substantial new funding for developing a Medicaid adult quality measurement program to complement CHIPRA children's quality measurement program (CMS 2010).

While CHIP has enjoyed bipartisan support throughout the years of its existence it has faced some resistance from politicians who view it as a step towards giving the federal government more power over health care. Democratic and Republican lawmakers support the ideals of CHIP and have witnessed the program's effectiveness in lower the percentage of uninsured children in their respective states and congressional districts. Federal policymakers view this problem as easily defined to a select group of children whose parents are unaware of the resources or to states that have complicated procedures to determine eligibility. However, there are program detractors who argue the bill is costly for the government and pose a "crowding out" risk to the private health insurance carriers. For example, President Bush vetoed a bill in 2007 that would have reauthorized the CHIP based on his view that the bill would "federalize health care, and that is would steer the program away from its core purpose of providing insurance for poor children and toward covering children from middle-class families (Stout, New York Times, 2007)." After much negotiation between the parties, the President ultimately signed the bill.

COOPERATIVE FEDERALISM FRAMEWORK

American federalism has involved cooperation and conflict between the federal and state levels of government for over 200 years. Scholars attribute this dynamic relationship in federal and state relations dating back to the time period when state constitutions predated the federal constitution. Decentralized government dominated the governance of state domestic policy affairs and continued to do so under the Articles of Confederation. Born out of dissatisfaction with the Articles, the creation of the national government sought to address unity, economics and commerce, and a design for the division of power and building of democratic institutions. Throughout American history, a "creative tension" has characterized federal-state relations as the states have assumed more responsibilities in administering and

financing federal programs. With this responsibility, states have been asked to modernize their governmental structures and processes to build their capacity to deliver public services.

One could argue that the debate over the proper role of the federal government in relation to the States is a classical debate that led to the origins of American public administration. On the one hand, the federalists, such as Alexander Hamilton and to a large degree, James Madison, were individuals who endorsed the ideals of a strong, national government, viewed the Articles as incapable of addressing the collective needs of the nation. On the other hand, the anti-federalists, viewed the idea of having such a national body as a direct threat to state sovereignty, leading to more federal intervention in state affairs. The tension between federalists and anti-federalists continues to this day. The federal government continues to rely on state governments to implement public policy. This is certainly true in the public health arena. In particular, the issue of children's health insurance includes federal and state cooperation in an effort to cover more of America's low-income children.

The interrelationship of financing and shared power in federal and state relations has forced policymakers to consider the implications to policy and program implementation. In support of congressional action establishing the 1953 Commission on Intergovernmental Relations, President Eisenhower, in a message to Congress, observed:

"In the state of the Union message I expressed my deep concern for the well-being of all of our citizens and the attainment of equality of opportunity for all. I further stated that our social rights are a most important part of our heritage and must be guarded and defended with all of our strength. I firmly believe that the primary way of accomplishing this is to recommend the creation of a commission to study the means of achieving a sounder relationship between Federal, State, and local governments" (Butler,1955,v).

Formally known as the Commission on Intergovernmental Relations, but also referred to as the Kestnbaum Commission in honor of committee Chairman, Meyer Kestnbaum, was created to find solutions to intergovernmental issues and challenges between the federal and state governments. With a temporal frame ranging from 1953-1955, the Commission released its report in 1955 drawing attention to the "the proper role of the federal government in relation to the States and their political subdivisions (Butler, 1955)." The Commission thought it necessary to examine whether or not intergovernmental functions and fiscal relations (extending federal grants-in-aid) needed to be adjusted for the carrying out of public policy.

CHIP is a classic example of the cooperative federalism framework. According to Pear (1997), federalism issues were a key part of the debate over whether to give money as a block grant or as an expansion of Medicaid, which retains a strong federal presence. According to Scheiber (1966), the model of cooperative federalism portrays the present-day federal system as one in which most of the important functions of government is shared (Scheiber, 1966, 65). Cooperative federalism demands "greater emphasis on the skills of indirect governance: understanding and mobilizing diffuse networks, placing a premium on bargaining skills and employing incentives, nurturing professional relationships" (Conlan, 2008, 38).

The interplay between the federal and state governments over the implementation of CHIP provides a good opportunity to explore this issue through the cooperative framework. The literature suggests that federalism involves "creative tension" between federal and state governments that often lead to conflict or cooperation. As Wright (1988) notes, cooperative federalism is generally considered to have characterized the intergovernmental system from the 1930s to the 1960s (Conlan and Posner, 2008, 33). It was during this period that the

federal government shifted program implementation and management to the states giving rise to an unprecedented mix of sharing functions and responsibilities (Conlan and Posner, 33). Further research into intergovernmental relations between the federal and state levels government will be needed to find ways to streamline the administrative process between the both layers.

The literature on intergovernmental relations suggests scholars and practitioners use various frameworks to explain the theories, concepts, and behaviors of federal and state relations. Cooperative federalism is one of the more dominant frameworks in intergovernmental relations. According to Conlan (2006), throughout the 1950s and into the 1960s, the paradigm of cooperative federalism blossomed (Conlan, 2006, 666). Cooperative federalism is credited primarily with ushering in an era of expanded federal aid to states through the federal grants system (grants-in-aid). Conlan (2006) maintains the U.S. saw the continued expansion of public health, agriculture, and urban renewal grants throughout the 1960s (666). Zimmerman (2001) notes that Elazar in 1962 conceived cooperative federalism—implying a “division of functions between governments as well as a division of governmental structures (Zimmerman, 2001, 18).” Elazar (1967) notes that the theory of cooperative federalism assumes a division of structures and a system of sharing that ranges from formal federal-state agreements covering specific programs to informal contacts on a regular basis for the sharing of information and experience.

Access to health insurance for America's low-income children is an important issue facing the U.S. The financing and implementation of health insurance coverage for low-income children between the ages of 0-19 has become an interesting intergovernmental issue facing federal and state public officials who administer public health programs (Kaiser Commission, 2011). Created in 1997, the Children's Health Insurance Program (CHIP) serves as a tremendous public sector effort to assist low-income, uninsured children who would otherwise be uninsured because of the lack of access to affordable health insurance. According to U.S. Census data, more than 7 million children are uninsured (U.S. Department of Health and Human Services, 2010, 4.). It is undeniable that states are increasingly asked to carry out federal programs, such as CHIP, to ensure eligible children in low-income families receive health insurance. Given the dire economic conditions in the U.S. of high unemployment over 8% and the depletion of state coffers with many facing severe deficits, one might expect states to face a greater burden of providing CHIP coverage.

The provision of publically-funded health care is a controversial issue that can be traced back to America's founding fathers and their views on the proper role of government. There is a long-standing debate between the ever-expanding role of the federal government in state domestic policy matters. The origins of this debate can be traced back to the federalists and anti-federalists during the country's earliest founding. Prior to the development of the federal design, the nation was governed by the Articles of Confederation which afforded the states great latitude for governing their domestic policy issues. As advocates of a strong national government, the federalists wanted to move away from the Articles in search of a national body that would attend to the needs of the country collectively: unity, economics and commerce, and a design for the division of power and building of democratic institutions. A federal government, from the viewpoint of the anti-federalists, amounted to an affront to their ideals of local power and control through small government and liberty from government bureaucracies.

POLICY IMPLEMENTATION: MAZMANIAN AND SABATIER(1981) FRAMEWORK

The success of the CHIP depends solely on political support and on the implementation process. Edwards (1980) defines policy implementation as the “the stage of policymaking between the establishment of a policy – such as the passage of a legislative act, the issuing of an executive order, the handling down of a judicial decision, or the promulgation of a regulatory rule and the consequences of the policy for the people whom it effects” (Edwards, 1980, 1). Policymakers and implementors can expect CHIP implementation to be difficult due to a number of key factors. Implementation will be influenced by the greater the extent of behavioral change called for among the targeted population of low-income families. Implementation barriers also include less clear, consistent communication among the actors; less adequate the resources provided to implementors; the less committed leaders are to the policy goals; and the greater the diversity of the Latino population of low-income families.

In order to address the issue of lack of health insurance among children, one could argue the most useful and appropriate conceptual framework on the CHIP implementation process is provided by Mazmanian and Sabatier (1981). The framework put forth by Mazmanian and Sabatier offers a valid theory connecting behavior change of parents to enroll uninsured children thereby solving the issue. Since we know that a child’s risk of being uninsured depends on family structure and where they live, public officials need to consider the dependent variable or the stages of the implementation process.

Policy Implementation Framework (PIF)

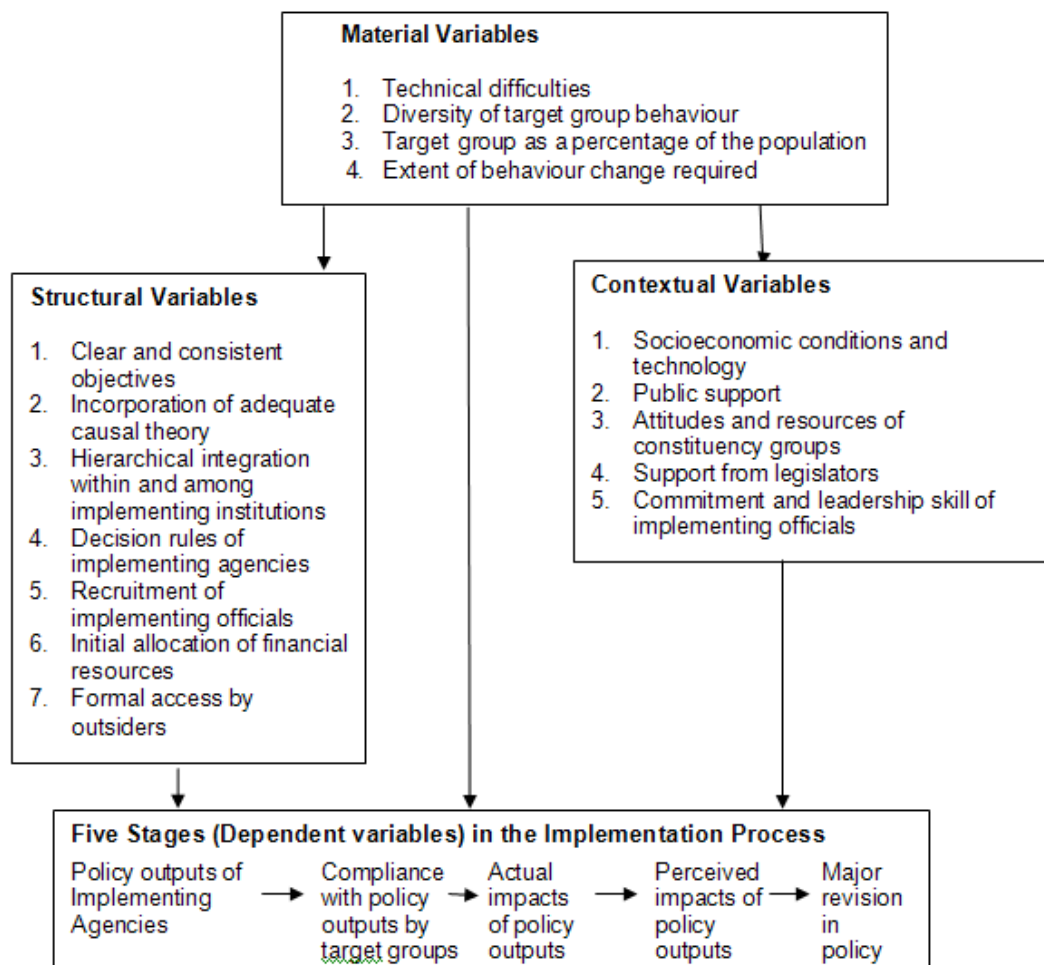


Figure 2: Mazmanian & Sabatier (1981) Policy Implementation Framework

Statutory Independent Variables

Priority to low-income Latino families with uninsured children must be communicated by CHIP's objectives. Any new directive without this sense of urgency or specificity will likely mean a delay in targeting the Latino population during program implementation. CHIP's program performance is directly tied to adequate causal theory. It is necessary that CHIP implementation to increase Latino involvement have causal theory clearly articulates the linkage between governmental intervention and the program's objectives. Also, the interaction between HHS officials and state government officials provide for critical sufficient jurisdiction and over actually obtaining the objectives. The intergovernmental nature of CHIP's implementation requires coordinated efforts between the federal and state governments.

While CHIP is a federal program, the states are the "driving force" behind program implementation. Hierarchical integration should be closely tied because loose integration presents the risk of having varied implementation among the states. CHIP legislation should include inducement and rewards to overcome potential veto clearance points throughout implementation. Compliance among all actors should be the goal. Although CHIP has received over \$40 billion in federal funding since its creation, additional federal and state funds will be needed to target the Latino population. The new program scope may require additional hire of bilingual staff and support. Clear, concise decision rules should be promulgated by HHS and partnering state agencies. The CHIP statute should eliminate confusing policies and complex enrollment and renewal policies for Latino families.

The solvability of the problem of covering uninsured, low-income children Latino children depends on the manageability of the issue. Mazmanian and Sabatier (1989), note that the smaller and more definable the target group the more likely the mobilization of political support in favor of the program and thus more probable the achievement of statutory objectives (24). Changes in CHIP implementation for state governments will require new and improve technologies to target the Latino population. According to the National Alliance for Hispanic Health (NAHH), technological capabilities will be need for collecting data by race and ethnicity (203).

Non-Statutory Independent Variables

The economic recession facing the U.S. makes the issue of insuring eligible Latino children politically salient for a number of reasons. Congressional leaders and the public most likely will view the program as critical given the loss of jobs and health insurance benefits that are attached to such employment. The demand to insure children is even greater during these difficult economic times. Not to mention, the growing Latino population has made it politically palatable to the Democratic and Republic parties to seek support from the Latino community its policy implications. It should be noted that there is variation in public support for public health programs. Public support most likely will depend on the economic and political considerations at the time of implementation. Major Latino constituency group could play a major role in supporting the government's efforts to enroll more Latino children and could act as an advocate.

Stages: Dependent Variables

The policy outputs should be consistent the program's intent to enroll more Latino children in CHIP. CHIP implementation should include policies and procedures that accommodate low-income, Latino parents. As recommended by the NAHH, the development of "streamlined and bilingual program applications must be produced to assist Latino parents (NAHH, 2003, 41.). The dissemination of Spanish informational materials will better assist Latino parents in making decisions. CHIP will actually achieve its desired impacts if: policy outputs are

consistent with statute objectives; target groups comply with outputs; no conflicting statutes; and statute incorporates causal theory linking behavioral change in target groups to the achievement of mandated goals (Mazmanian, 1989, 37).

DISCUSSION AND CONCLUSION

The CHIP is the nation's premier federal tool that provides states with the financing needed to insure eligible Latino children. Given the gridlock of the political process and the precarious economic condition of the U.S. economy, continued support of CHIP is politically salient and likely to draw bi-partisan support for the foreseeable future. Congressional leaders and the public most likely will view the program as critical given the loss of jobs and health insurance benefits that are attached to such employment.

Federal-state intergovernmental relations over CHIP face a number of implementation barriers that must be considered by scholars and practitioners. Although the solvability of the problem of covering uninsured, low-income Latino children is manageable, there are real uncertainties over the resources provided to the states by the federal government. Mazmanian and Sabatier (1989), note that the smaller and more definable the target group, the more likely the mobilization of political support in favor of the program and thus more probable the achievement of statutory objectives (1989, 1989, 24). Targeting the Latino population presents an opportunity to achieve real results in enrolling more eligible children.

Funding levels will depend on the commitment of political leaders to the program's original goals and intent. Conlan (2006) argues that the cooperative framework has largely unraveled due to a change in the federal system from intergovernmental management to performance management (666). The complexity of joint action involved among federal and state implementors could be amplified given the rich diversity of the Latino population (i.e. Mexican Americans, Puerto Ricans, and Cuban Americans, just to name a few).

Intergovernmental relations will continue to be influenced by the cooperative framework in addressing public administration issues. Federal and state governments will continue to debate over policy matters and which level of government has the appropriate purview over them. The states will contend they have the best policy prescriptions and corrective actions for many public policy issues, while federal officials will argue they are better suited to handle such matters. While it is uncertain how this relationship will develop in the future, it is clear the war of ideas will continue as both sides work to build the perfect union.

A review of the literature on implementation would suggest that future implementation of CHIP will be more difficult to achieve. Since access to health coverage for the number of uninsured Latino children is the focus of this paper, the measure of CHIP success is measured in terms of the number of children enrolled. Action needs to be taken to incorporate cultural competency into the policy implementation of CHIP. In particular, the focus of the program should be on the growing number of low-income, uninsured Latino children. National statistics clearly show that the Latino population is burgeoning in many parts of the country, and with this dramatic population shift, it is incumbent on public administration to be culturally competent to the needs of the community. While CHIP has done a remarkable job of enrolling children across racial and ethnic backgrounds since 1997, more work needs to be done to ensure that all of America's children have access and affordability to health care insurance. This truth holds implications for the health of the nation and the productivity of its workforce.

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Cultural Reproduction of Javanese *Gamelan* Creation

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ABSTRACT

This research aimed to find out the cultural reproduction of Javanese *gamelan* creation. *Gamelan* is an Indonesian orchestra composed mainly of tuned percussion instruments such as bamboo xylophones, wooden or metal chimes, and gongs. This research consisting of life attitude, work ethos, and skill of craftspeople in creation of Javanese *gamelan*. Cultural reproduction practice occurs in family, school/art institute/home industry environment and *gamelan* industry center community. This study employed naturalistic inquiry, describing the cultural reproduction of Javanese *gamelan* Creation naturally; the informants of research consisted of *Empu* (master craftsman) who produces *gamelan*, *gamelan* craftspeople, Javanese *gamelan* art figure, and Javanese *gamelan* users. The result of research revealed that life attitudes the *Empu* and the *gamelan* craftspeople had were: awareness of giving service to God, faith in God, being loyal to their job, submitting to the fate with gratitude, never being desperate, and having noble character. The work ethos of *Empu* and craftspeople included: hard work, high togetherness, carefulness, tolerance, high sense of belonging to the job, and mutual help. Meanwhile, *gamelan* creation skill included: *membesot*, *menyingi*, *menempa*, *membabar*, and *melaras*. Life attitude, work ethos, and skill of *gamelan* creation occurred through parents' socialization from one generation to the next or from *Empu* to craftspeople in home industry. In industrial center community, *gamelan* gave Wirun villagers an identity as tough and reliable *Empu* and craftspeople.

Keywords: Cultural Reproduction, Life Attitude, Work Ethos, *Gamelan*.

INTRODUCTION

In this era of globalization, there's need for every culture to preserve their identity. Every culture have to prepare theirselves in the face of global culture that bring characteristic of modernity and evaluative (Widayat, 2001). This is along the line with Kartodidjo (1997 pg 4-6), he argued that to face the social change, there's must be preservation of cultural aspect, because most chances the 'old' culture will meet the new culture, to define their means in the communities life.

In Java, the expression of culture also being represented by its art. Art in Java contain such rich values of Java's way of life. It's also represent the connection of Javanese people and their God. One of most prominent art in Java is *gamelan*. Koentjaraningrat (1984) says that Javanese *gamelan* is one of cultural art bequeathed by predecessors/ancestors and still preferred and preoccupied with by many people until today. Javanese *gamelan* is a set traditional music instruments consisting of *saron*, *peking*, *dhemung*, *bonang*, *kempul*, *gender*, *slenthem*, *kenong*, *ketok kempyang*, *gong* and etc. Basic materials used to produce *gamelan* are mixed iron, brass, and bronze.

Philosophically, Javanese *gamelan* is an integral part of Javanese people's life attitude and work ethos. Pranoto (2013) reveals the relationship between Javanese gamelan and social, moral, and spiritual values. Many Javanese, national and even international people have had Javanese gamelan today. Goldworthy (1997) suggests that Australian international education institution in addition to having a set of complete Javanese gamelan also organizes Javanese gamelan music art education.

Herusatoto (2005) mentions that the Javanese people's life attitude suggested in *gamelan* music includes maintaining the harmony of physical and spiritual lives, and the harmony of speaking and acting. Therefore, they always avoid displaying explosive emotion and keep tolerance between their fellows. Its real form in gamelan music is rebab string pulling combined harmoniously with the sound of *kenong*, *saron*, *kendang* and *gambang*, as well as *gong* in the closing of each rhythm.

Although being the representation of culture and way of life in Java, the creation and appreciation of gamelan were decreasing in this present globalization era. There's several region in Java that produce gamelan, but specially for Javanese gamelan creation one of the most popular and active place were in Sukoharjo, Central Java. Sukoharjo is a Javanese culture and art-based creative industry area. One of art-based industries that have gone international is gamelan production art. Gamelan creation has been marketed in both Indonesian domestic and export markets. *Empu* and craftspeople of Javanese gamelan provide image and identity of Javanese art and culture. One of area of Sukoharjo regions to gamelan creation is Wirun Village in which gamelan production business has been sent down from one generation to the next. According to Good News From Indonesia GNFI (25/8/2016), Gamelan Craft in the Wirun Village started at 1956. This research furthermore will explore the gamelan creation in Wirun Village to study the cultural reproduction through Javanese gamelan creation.

METHODS

This research was taken place in Gamelan Craft Industrial Center located in Wirun Village of Sukoharjo region. The gamelan creation which has been marketed to both domestic and international markets. This research employed naturalistic inquiry type, describing cultural reproduction of Javanese gamelan creation naturally (Lincoln, Yvonna S and Guba, Egon G, 1985). Techniques of collecting data employed were direct field observation, in-depth interview using interview guide to get in-depth information by interviewing and questioning the informant directly and freely, and documentation to obtain data through recording, book, as well as secondary data, monograph and photograph data (Miles, Matthew B and Huberman A Michael, 1992; and Sugiyono, 2011). The informants of research consisted of *empu* (master craftsman) who produces gamelan, gamelan craftspeople, Javanese gamelan art figure, and Javanese gamelan users. Data validation was carried out using source triangulation to obtain higher reliability level by comparing and rechecking the reliability of information obtained from different informants. Technique of analyzing data used in this study was an interactive model of analysis (Miles and Huberman, 1992). The analysis activity mainly included: data collection, data reduction, data display, and draw conclusion.

LITERATURE REVIEW

Many studies on Javanese gamelan have been conducted previously. This study is different from the previous ones. Compared with previous studies conducted by Pranoto, David, and Elin, this study is different in the term of theory and method used. Despite its differences, this research becomes reference related to cultural reproduction in Javanese *gamelan* creation because the process of producing Javanese gamelan is inseparable from the culture existing in Javanese people. The result of research shows that life attitudes the *empu* and the gamelan

craftspeople had were: awareness of giving service to God, trusting in God and themselves, being loyal to their job, submitting to the fate with gratitude, never being desperate, and having noble character. The work ethos of empu and craftspeople included: hard work, high togetherness, carefulness, tolerance, high sense of belonging to the job, and mutual help.

Another study on *gamelan* conducted by Pranoto David, and Elin is different in the terms of theory and method used. The study used qualitative method concerning the sacredness element of Javanese Gamelan in the past and in the future, and gamelan teaching approach in Australia. The author tries to confirm the cultural reproduction in Javanese Gamelan production. The novelty of current study is that it studies life attitude, work ethos, and *gamelan* production skill. Life attitude, work ethos, and skill of *gamelan* production occurred through parents' socialization from one generation to the next. This study employs naturalistic inquiry, describing the cultural reproduction of Javanese gamelan production naturally.

Understanding Cultural Reproduction

This study is analyzed using cultural reproduction concept, in the sense of the preservation of cultural values from one generation to another. Bourdieu Pierre, and Claude (1970/1990) divide cultural capital into three: cultural capital of mind disposition and physical/embodied disposition (knowledge/life attitude, expertise/skill, taste), objectification form of cultural capital (prescription, formula, artistic object), and institutionalized cultural capital (certificate, diploma).

Cultural reproduction can occur in family environment, formal education, and community through interacting with competent people. Tzanakis (2011), and Isstianto, Sunarto, et al., (2016) suggest that family environment keeps affecting and creating family members to have knowledge on life attitude, speaking, skill and intercourse. Formal education can create social norm values delivered by teacher to students. Hanindraputri and Eufrasia Kartika (2017) reveal that in the community, the interaction with competent people can affect knowledge on social norm values, social norms, and skill that has been implemented and create social identity in the members of community.

Wright (1958) says that family environment, formal education, and community create an individual's life attitude. Social, cultural, and religious aspects can create work ethos. Life attitude is a main element of social-cultural aspect of community creating work ethos. Life attitude prioritizing the physical-spiritual balance and the world-hereafter balance will create a tough and reliable work ethos. Max Weber (1905), Hagen (1962), Sinamo, Jansen (2005), and Sudrajat, Ajat (1994) suggest that work ethos is the work spirit becoming an individual's or a group's typical characteristics and belief. In protestant ethics and capitalism spirit, Weber found mainly: (1) an assumption that any type of job and its level are God's calling, (2) job success signs that God has given them an opportunity of exalting His name, (3) ethic grows work ethos, discipline, hard work, parsimony or profit not for wasting money, but for saving it. Thus, the implications of protestant ethic are the job success improving within community, high rate of production, and accumulating profit.

Javanese Gamelan

When we discuss about the *gamelan*, we cant take out the Javenesse culture and it's way of life out of discussio. Java in general were rich of values, rules and way of life. Pranoto, and Tjaroko HP Teguh (2007) mention that Javanese people's life perspective on Javanese mysticism is still adhered to widely by some Javanese people in the form of *aliran kebatinan* (syncretism). Nearly all of Javanese mysticism and ancient Javanese letters are anthropocentric in nature,

with human beings as the center or the starting point of everything. Human being has genuine soul that is spiritual, everlasting in nature, and so on.

Jong (1976) and Mumfangati and Titi (1998) suggest that Javanese people's life attitude is included in *Tri - Sila* constituting the principles that should be implemented by human beings everyday and the three things to which human beings' mind and work should point in paying homage to God, including *eling* or being aware (conscious), *pracaya* or trust, and *mituhu* or doing the instruction loyally. *Eling* means always giving service to the One and Only God. *Pracaya* means trusting in the self and Allah, and *mituhu* means being loyal and always doing His instruction.

Javanese gamelan creation process is a cultural product inseparable from its cultural proponents, the community itself. Cultural product in gamelan form is the manifestation of expression of community idea, thought, or behavior poured into one of cultural elements. Therefore, the existence of gamelan is inseparable from artists' existence and behavior. Javanese gamelan orchestra contains at least 23 instruments: 13 percussions, 4 large drums, a set of gongs, two strings, a *clempung*, a rebab (two-stringed musical instrument), and a bamboo-made flute (*suling*) (Koentjaraningrat, 1984:294). Basic tune (*balungan*) of a composition for *gamelan* orchestra (*gendhing*) is performed repeatedly with three to 14 *sarons*. The gamelan instruments have varying sound outputs. Some release hard sound and some other release soft sound. The soft-sounding gamelan instrument includes a set of metal percussions such as: bonang, gender panembung, gender panerus, and true panembung, and wood percussion called *gambang*. *Clempung*, *rebab* and *suling* are soft instruments as well. Javanese gamelan producing process uses lead and copper in the following stages: *membesot* (melting the mixed metals), *menyingi* (casting), *menempa* (shaping by hitting or forging), *membabar* (finishing), and *melaras* (harmonizing the tone).

RESULT AND DISCUSSION

Sukoharjo Regency is the one adjacent to Surakarta in the north, Karanganyar Regency in the east, Wonogiri Regency, and Gunung Kidul Regency in the south, and Klaten and Boyolali Regencies in the west. Sukoharjo Regency has some famous names, one of which is Gamelan City. Therefore, in Sukoharjo Regency many gamelan craftspeople are found, particularly in Wirun Village of Mojolaban Sub District. Those gamelan craftspeople have contributed some values to archipelago music history and its development. There are 19 gamelan *Empus* today, having company name in Sukoharjo Regency area and about 110 craftspeople.

Javanese People's Life Attitude

To asses their work and work ethos, Javanese people have distinctive criteria of assessment. To make assessment on an individual's work, some symbols re used as paradigm: *trapsila*, *ukara*, *sastra*, *susila*, and *karya* (work). *Trapsila* is an action in respecting others, and *ukara* is the assessment on chronological, clear, and honest words. *Sastra* means measuring an individual's communicating abilty. *Susila* is related to an individual's morality.

Gamelan has been recognized as Javanese traditional instrument by the world. International world has responded greatly to gamelan. It can be seen from gamelan craftspeople who have received order from foreign countries. The result of interview with an informant shows that he has ever gone abroad (Japan) to harmonize the tone of *gamelan*. Many people order gamelan including delivery and harmonization of gamelan tone in the location of ordering. Many gamelan businesses are run from one generation to the next; gamelan business in Wirun Village has been established from 1958 until today. Family environment highly affects an individual's skill and attitude. Although the skill is sent down to the next generation, it is not

always as same as that of the old generation. The skill is acquired not only in the family but also in community and art institute. An informant studies and working in the location where gamelan Empu and craftspeople stay in Wirun Village until finally he established his own business in 2010. From the interview with gamelan producing Empus, it can be found that they have plunged into gamelan producing activity since 1998 along with previous Empus. Art institute environment provides gamelan producing-cultural values. In producing gamelan, some rites should be done, but as time progress these rites are done more rarely, and they are done when the customers request it. This rite is called *gongso* for the safety of gamelan, conducted during the first *gamelan* forging during the reservation by being patient, fasting on Monday and Thursday, and submitting the feeling to the Owner of life.

Gamelan craftspeople also hold on Javanese thought to work and to behave in daily life. The life attitude they hold on is Tri Sila, by which they are always aware of giving service to God, believing in God and their personal soul that any knowledge and skill derive from Him, and *Mituhu* or doing His instruction loyally and keeping themselves far away from His prohibition. They treat *gamelan* as their life value sources as Javanese people and as the media of praying. During working, they always make time for worshipping and making praying rite, but this praying rite has been done rarely, and they try to work honestly. In addition, *rila* (willingness), *narimo* (submitted), *temen* (persistence), *not desperate*, and noble characters are inherent to gamelan Empu and craftspeople. In producing *gamelan gong*, craftspeople should be sincere, patient, and have world-hereafter balance, as it is related to the *gong* producing process requiring the feeling (sense).

Table 1. Matrix of Craftspeople Life Attitude, Work Ethos, and Behavior

No	Cultural Reproduction	Note
1	Life attitude	Awareness of giving service to God, trusting in God and themselves, being loyal to their job, submitting to the fate with gratitude, never being desperate, and having noble character.
2	Work Ethos	Hard work, high togetherness, carefulness, tolerance, high sense of belonging to the job, and mutual help.
3	Craftspeople behavior in producing Gamelan	Gamelan production needs high cooperation to get a perfect gamelan. Gamelan producing process starts with <i>membesot</i> , <i>menyingi</i> , <i>menempa</i> , <i>membabar</i> , and <i>melaras</i> .

Source: Report of Primary Data Analysis, 2017

Work Ethos of Gamelan Craftspeople

Empu and craftspeople have Javanese people attitude including: *rila* (willingness), consciousness, believing in God and the self, loyalty, optimism, and noble character. Those life attitudes create work ethos of gamelan empu and craftspeople. Pedro (2016), Mentari (2017), and Ahmad (2004) Malik, M Luthfi (2013), Rosmiani (1996), Tasmara, Toto, KH (2002), and Wijaya, Mahendra (2008) suggest that work ethos are composed of social values, working habit the craftspeople have for many years. Work ethos of gamelan business performers or empus and craftspeople are hard work, high togetherness, carefulness, tolerance, high sense of belonging to job, and mutual help. The craftspeople work hard to support their family's life, to enroll their children in school and to meet their daily needs. Most *gamelan* craftspeople come from relatives or neighbor. The craftspeople have high togetherness, composed of attitude of supporting each other. There is no competition between gamelan business performers. Empu and craftspeople have high tolerance. When the child of a craftspeople is sick, he will be allowed to go home and accompany his child, and when the child need some treatment in hospital, Empu will contribute some fund for medication fee. The gamelan producing skill is not acquired easily, so that craftspeople need many years to master it.

Javanese Gamelan Production

Gamelan production in Wirun Village is conducted in some stages. The materials used are lead and copper, while gamelan seat or support is made of wood, done out of Wirun Village. Gamelan production needs high cooperation to get a perfect gamelan. The skill the empu and the craftspeople have is not acquired easily, so that it takes a long time (many years) to arrive at *melaras* stage. The procedure of gamelan production is as follows:

1. *Membesot* consisting of an activity of preparing lead and copper bar, and cutting them, weighing and mixing lead and copper with 3:10 ratio.
2. *Menyingi* consisting of the process of melting lead and copper using charcoal burnt at high temperature. The liquid lead and copper are then poured onto the circle- or bar-shaped cast.
3. *Menempa* constituting the process of shaping gamelan starting with forging the circle-or bar-shaped bronze sheet repeatedly until producing a new shape constituting the base of gamelan instruments such as *kenong*, *kethuk*, *kempul*, *kempyang*, *saron*, and etc. Then, the basic shape of instrument is dipped into water for the cooling process.
4. *Membabar* is the process of refining the finished instrument to be furnished, adorned with batik ornament, and given seat
5. *Melaras* is the process of adjusting and acquiring the tone using tone indicator. Particularly *gong* is buried (*dipethak*) to create concavity on its edge, in order to get an appropriate tone.

Related to Bourdieu (1993), Bourdieu (1974) and Adib's (2012) theories about cultural capital concept, the cultural capital of gamelan craftspeople in Wirun Village is obtained through various socialization interaction established in family environment, community, and art institution. Gamelan craft business and craftsperson profession are run hereditarily within family, but they are also found beyond the craftspeople family. The capital distributed keeps inherent and results in cultural reproduction. Family environment is the primary socialization place for child, so that the learning and knowledge delivering processes occur most widely within the family. This knowledge includes speaking ability, life values, life attitude, gamelan producing skill, and work ethos establishment. Art institute environment also gives an individual the knowledge on how to behave as Javanese people through the gamelan itself. Meanwhile, the community teaches knowledge about gamelan producing skill. Community environment makes identity of Wirun Villagers as gamelan producing center in Indonesia and as tough and reliable empu and craftspeople.

- a) Cultural capital includes mind disposition and physical/embodied disposition, in which gamelan craftspeople have had knowledge on life attitude, work ethos, gamelan producing skill acquired from family environment, art studio, and community.
- b) Cultural capital of objectification form is that Wirun village produce artistic object in the form of *gamelan gong* art, the prescription of which has been sent down hereditarily within family using rites in producing it.
- c) Institutionalized cultural capital is that the craftspeople acquire skill from artistic studio by learning from the empu. Art institute gives knowledge on cultural values of gamelan production.

Cultural capital acquired by gamelan craftspeople is dominated more with embodied disposition coming from family environment including life attitude (consciousness, trust in God, willingness, submission, and persistence), work ethos (strong tolerance with fellow human beings and workers). The objective form of gamelan production has been implemented from one generation to the next, but there is a difference between the past and the present. That is, in production process, the materials obtained no longer as same as those obtained in the past, *gongso* rite usually held during gamelan production in the past has been abandoned,

and only done when customers request it. The present customers are different from the past ones; in the past only kingdom or court order this gamelan, but now either domestic or foreign schools and universities, and government can order it. It is done to preserve Javanese gamelan that has been the Javanese identity. Thus, Wirun Villagers as gamelan craftspeople, have created cultural reproduction through three cultural capital forms.

CONCLUSION

Cultural reproduction of Javanese gamelan production in Wirun Village is acquired through family environment, art institute, and community. Family environment is the primary socialization place for child. Thus, knowledge on life attitude values, work ethos, and gamelan-producing skill can be distributed through family. Gamelan craftspeople in Wirun Village have had cultural capital including knowledge, skill, life attitude, and work ethos through interacting with environment. The change that can reproduce the gamelan producing culture is that the customers ordering gamelan now come not only from kingdom/court but also school, university, and government. Gamelan production is conducted using rite if only the customers want to. Family environment has created identity of Wirun Village as the gamelan crafting center. This cultural reproduction arises as the preservation of Javanese gamelan.

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Factors Affecting Adoption Of Embryo Transfer Technology In Dairy Cattle In Kenya

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ABSTRACT

The use of assisted reproductive technologies in dairy farming has supported many countries to achieve sustainable milk production. These technologies include; artificial insemination (AI) using conventional and gender selected semen, embryo transfer based on multiple ovulation & embryo transfer (MOET) or invitro embryo production (IVEP), among others. A study was carried out to determine factors that affect adoption of embryo transfer (ET) in Kenya. A questionnaire was designed and administered to 385 respondents to determine their perception on MOET adoption. None of the respondents had used MOET to improve their livestock. This was mainly attributed to lack of awareness of the existence of the technique as shown by 58.7% of respondents in Uasin Gishu and 46.7% in TransNzoia counties). Other factors affecting adoption included; Lack of experts to carry out the procedure, cost of the technique and non-availability. However, the respondents would adopt MOET if it's made available (72% in Uasin Gishu and 79% in TransNzoia Counties). More than 60% of respondents in both counties breed their own replacement heifers and only 40% outsource the heifers from other breeders. Sensitization of the farmers on the available assisted reproductive techniques and their potential is the first step towards achievement food and nutrition security as envisioned in the Big Four agenda and Vision 2030 of the government of Kenya and sustainable development goals (SDGs).

Key words: Embryo transfer, adoption, reproductive technologies, dairy cattle, breeding, milk production

INTRODUCTION

Multiple ovulation and embryo transfer (MOET) has been practiced in many countries for many years. In early 1970s commercialization of embryo transfer (ET) began [1]. The initial technique for recovering and transferring embryos in a MOET program was through surgical procedures but later, with research and better understanding of the reproductive system, it became possible to recover and transfer embryos in a none surgical way [1]. Most of these embryos were transferred immediately thereafter until the advent of cryopreservation which began in 1980s and allowed for preservation and transfer at a later date. This was later followed by the introduction of embryo splitting to create twins and more, in vitro embryo

production which allowed oocytes to be harvested with fertilization and maturation taking place outside the body of the donor, direct transfer of frozen embryos and sexing of embryos [1]. Embryo transfer is now carried out more frequently than in the past, with production of more embryos per year per donor in countries with regular practice [2]. Embryos are the preferred mode of importing genetic material compared with live animal [3].

MOET permits utilization of superior cows hence exploiting their reproductive potential. The cow to cow pathways of inheritance would thus contribute more to the overall genetic improvement of the herd [4]. The number of off springs from superior dams is substantially increased in comparison with natural reproduction. A cow will normally produce one calf per year but can produce up to 30 embryos per year if flushed every two months. MOET has been shown to reduce generation interval hence useful in progeny testing programs for evaluation of sires for use in artificial insemination (A.I) [1] and production of replacement heifers [5]. The MOET programme used to genetically test AI sires has reduced the waiting time from five-and-a-half years when using traditional progeny testing schemes to three-and-a-half years [4].

Supply of quality replacement heifers are inadequate in Kenya and those available are usually expensive [5]. This inadequacy is due to low adoption of reproductive technologies by breeders among other factors [5,6]. Most of the smallholder farmers use natural service or haphazard application of artificial insemination [7]. Most of the heifers from such mating are of inferior quality and may not be desirable for milk production. This has led to a high demand for dairy breeding stock from large scale farms pushing the prices to USD 2,000-3,000, a situation that is not only unsustainable but also out of reach to most of the smallholder farmers. Despite the high prices, the replacement heifers are hardly available in the market. Smallholder farmers are involved in small scale production and keep a few cows in a dairy production unit. Majority of them rear one to twenty dairy cows.

Farmers have recently attempted importation of dairy cattle from South Africa and Netherlands. This was to alleviate the acute shortage of quality dairy cattle being experienced in Kenya. The heifers from South Africa arrived at a cost of over USD 2,000 overland. Such venture is non tenable due to risks of spreading diseases, effect of genotype x environment interactions and shipping fever leading to abortions and deaths from long distance transportation. The cows take longer period of time to adapt to the new environment and initial production was disappointing due to poor adaptation. Those that came by air adapted quickly but the cost of transportation is prohibitive unless it's for production of semen or embryos. The large scale farmers could try this but the smallholder farmers have minimal opportunity due to high costs and risks involved in translocation, treatments and quarantine.

The importation of live animals is more costly when compared to importation of frozen embryos. There is a reduced risk of disease transmission and reduction of quarantine costs in the use of embryos compared to live animals [3]. Importation of embryos allows for the selection of animals from a wider genetic base and the donor animals remain within the exporting country hence preserving such genes in the country [3]. Dairy cattle farmers can get the best genes which could have been impossible with live animal importation. Furthermore, the animals produced from embryos are adapted well to the environment of the importing country where they are born due to the influence of surrogate dams unlike imported live animals. Adaptation is important in the tropical and subtropical environments where the likelihood of influence of genotype x environment interaction is high.

In spite of several attempts to introduce ET in Kenya, uptake of the technology has been insignificant. Though embryo transfer has been practiced hitherto, in a small scale for over 30

years in Kenya, adoption of this technology by most dairy cattle breeders has been slow. Embryo transfer in Kenya began in 1982 with the use of imported embryos. It was not until 1998 that the superovulation of donors and harvesting of embryos began in the country. Since then, more super ovulations, harvesting and transfer of embryos have been conducted. It wasn't until 2005 that more frequent embryo transfer programs began to be conducted in Kenya [4]. Most of the embryo transfer programs have been carried out in either government farms or a few large-scale farms. Most large scale and smallholder farmers are yet to use this technology which has been proven to enhance the quality of dairy cattle.

The livestock sector contributes 12% of the gross domestic product (GDP) in Kenya [8,9] with dairy subsector estimated to contribute over 4% of the GDP [10]. Demand for milk in Kenya is projected to rise to 12.76 billion litres per year by the year 2030 from the current 4.5 billion litres [10]. This demand will be met through increased milk production per cow in smallholder farms. Over 80% of all milk in Kenya is produced by smallholder dairy cattle farmers in rural areas [10]. Increase in production per cow will be achieved if smallholder farmers embrace new techniques of milk production both in breeding and feeding. Currently, the country has a shortfall of 334 million litres of milk and is expected to worsen if better production techniques are not utilized.

A conventional method of heifer production through artificial insemination has not been able to satisfy farmer demands for quality dairy cattle. A.I. has been practiced in Kenya since 1946 and a lot of progress has been made in quality of breeding stock though much more needs to be done. The use of a combination of the existing assisted reproductive techniques is therefore important if supply has to meet the demand. Reproductive efficiency of the top producing cows through Multiple ovulation and embryo transfer (MOET) may provide the solution to this demand which has driven the prices of replacement breeding stock way above what the ordinary dairy cattle farmer in Kenya can afford.

The purpose of the study was therefore, to determine factors that affect adoption of MOET in Kenya in order to shed light on how to address the same for enhanced utilization of ET for improved dairy cattle productivity. For developing countries to meet the current and future demands for livestock and livestock products and enhanced food security, it is important to improve the livestock production [5]. This is possible through adoption of cutting edge technologies available in the livestock sector.

MATERIALS AND METHODS

Study Site

The study was carried out in Uasin Gishu and TransNzoia Counties situated along the Rift Valley in Kenya. The two counties are among those designated as food baskets for the country and poised to play a key role in realization of the Big Four agenda of the government. Livestock farming is an important enterprise in both counties and the county governments have begun a subsidized artificial insemination service to farmers in an effort to boost milk production. A.I. was introduced to improve the quality of the livestock, thus improving their production. Livestock farmers in the two counties produce the bulk of milk in the region and are ranked 3rd and 4th in Kenya. Majority of the farmers are of smallholder category though a few large scale farms are found in the two counties.

Experimental Design

The aim of the study was to evaluate the factors that affected the adoption of MOET by dairy farmers. The design was to collect data from a scientifically derived number of dairy farmers already practicing assisted reproductive technologies within TransNzoia and Uasin Gishu

counties through simple random method from a pool of data available at the county veterinary offices. The sample size of 385 farmers (respondents) was derived using predetermined criteria of 95% confidence level, standard deviation of 0.5 and a margin of error of 5% as calculated below:

$$SS = Z^2 \times \text{Std Dev.} \times (1 - \text{Std Dev.}) / C^2$$

(Creative research systems, 2015
<https://www.surveysystem.com/index.html>)

Where SS is the sample size, Z is the confidence level at 95% (1.96), C is the margin of error at 5% (0.05) and Std Dev is the standard deviation (0.5)

Data Handling and Analysis

The questionnaire was designed to capture the independent and dependent variables and administered to the 385 respondents. The data was used to generate the list of factors affecting MOET as the independent variables against the dependent variable of the adoption of MOET by the farmer (the farmers were rated either as adopted or not adopted). SPSS software version 20 (<https://www.ibm.com/analytics/us/en/spss/spss-statistics-version/>) was used for the analysis. The independent factors tested to have affected the adoption rate included: Availability of technology; Availability of experts; Lack of awareness; Cost of the technology. The analytical comparison of associations for each of the independent variables at 99% confidence level ($P \leq 0.01$) were tested against two levels of adoption for the two counties using Kendall's Tau correlation coefficient in SPSS software.

Description of the Study Population

More than 50% of respondents in Uasin Gishu county practice extensive dairy cattle rearing system compared to only 10% of those in TransNzoia County. Two thirds (2/3) of the respondents practice semi-intensive system of production in TransNzoia compared to one third (1/3) in Uasin Gishu. Only 8% of respondents in Uasin Gishu and 12% in TransNzoia County practice intensive system of livestock production.

Almost one third (1/3) of the respondents in TransNzoia County keep a mixed herd of Friesians and Ayrshires compared to 24% of those in Uasin Gishu. 25% of farmers in Uasin Gishu keep only Friesians. Sole Ayrshire cattle herds were reared by 21% of respondents in Uasin Gishu and 24% in TransNzoia. 21% of farmers in TransNzoia keep cross breed cattle compared to 28% in Uasin Gishu.

Most respondents, 93% in Uasin Gishu and 74% in TransNzoia are smallholder dairy cattle farmers keeping less than 20 dairy cattle. More than 70% of respondents in both counties sell heifers at price range of USD 500 to 1,000. The majority of the respondents; 54% in Uasin Gishu and 62% in TransNzoia use conventional artificial insemination (AI) while 40% in Uasin Gishu and 9% in TransNzoia used both conventional and sexed semen.

RESULTS

None of the respondents has used MOET to improve their livestock. This was mainly attributed to lack of awareness of the existence of the technique as shown by 58.7% of respondents in Uasin Gishu and 46.7% in TransNzoia Counties) (Table 1). Lack of experts to carry out the procedure was also cited as the reason for the poor adoption of ET by 28% and 31.3% of the respondents in Uasin Gishu and TransNzoia respectively. Only a few respondents cited the cost as a reason for the slow adoption of the technique (Table 1). However, the respondents would adopt MOET if it's made available (72% in Uasin Gishu and 79% in TransNzoia Counties). More

than 60% of respondents in both counties breed their own replacement heifers and only 40% outsource the heifers from other breeders.

Table 1. Proportions p(%) of respondents in Uasin Gishu and TransNzoia that attributed none-use of MOET to various independent factors: Cost of MOET, lack of experts, Lack of awareness or unavailability of the technology

Factor	Uasin Gishu		TransNzoia	
	p(%)	SE(p)	p(%)	SE(p)
Cost of MOET	6.3	2.0	12.7	2.7
Lack of experts	28.0	3.8	31.3	3.8
Un awareness	58.7	4.1	46.7	4.1
Unavailability	7.0	2.1	9.3	2.4
Total	100.0		100.0	

The results of correlation analysis among the factors that influence adoption and respondents' willingness to adopt embryo transfer if availed is given on table 2.

Table 2. Kendall's tau Correlation matrix for factors affecting adoption of ET

	Lack of awareness	Not available	Lack of experts	Costly	Adoption If available
Lack of awareness		-.356**	-.632**	-.300**	-.084
Not available	-.309**		-.257**	-.122	.194**
Lack of experts	-.744**	-.162**		-.217**	.345**
Costly	-.327**	-.071	-.171**		-.629**
Adoption if ET is made available	-.237**	.162**	.388**	-.379**	

** Correlation is significant at the 0.01 level (2-tailed).

Values below the diagonal pertain to Uasin Gishu and those above diagonal to TransNzoia Counties

DISCUSSION

MOET programme, though an important tool in animal breeding for livestock improvement is hardly used in Kenya. There are only a few large-scale dairy cattle breeders who have attempted its use with variable success. Dairy cattle farming is in the hands of smallholder farmers who keep between one to twenty dairy cows. Only about 10% of the dairy cattle farmers are classified as large scale producers. Smallholder dairy cattle farmers will hardly search for newer technologies for improvement of their dairy herds in the market place. Most of them practice extensive and semi intensive systems of livestock production. They depend solely on government, cooperative societies and nongovernmental organizations for extension services.

Most dairy cattle farmers interviewed were not aware of the existence of embryo transfer technique in Kenya. This was attributed to the fact that most of the farmers interviewed were smallholder practicing either extensive or semi intensive form of dairy farming. There was also no documented research which has been done to evaluate factors that may influence adoption of MOET in Kenya. It has been shown that farm size, age of the farmer and type of farming system has influence in the adoption of new technologies ([11,12]. Large scale dairy farmers are most likely to embrace newer technologies compared to smallholder farmers. Large scale farmers have the desire to maximize production hence their profits compared to the smallholder farmer. In the current study, it has been clearly demonstrated that farmers in

extensive and semi intensive production systems with small farm sizes have not adopted embryo transfer technology for improvement of their dairy cattle despite its availability in Kenya over the last 30 years.

Lack of awareness may have contributed to the slow adoption of embryo transfer technology in Kenya therefore leading to the high demand for breeding heifers with resultant stiff rise in prices over a few years ago. The prevailing prices of dairy in calf heifers from many breeders range from USD 1,000 to 3,000. This has led to unaffordability and inaccessibility of breeding heifers to many smallholder dairy cattle farmers. These group of farmers are likely to embrace the embryo transfer technology provided adequate sensitization is done. There is urgent need to build and improve the existing ET capacity and infrastructure for meaningful adoption to be realized.

Smallholder farmers comprise 90% of the total number of dairy cattle owners and contribute approximately 80% of the total milk production in Kenya [10]. The average age of the farmer is estimated to be approximately 60 years in Kenya. The subsector has failed to attract the younger population due lack of land ownership by the youth who feel they are only used as laborers in the farm. This has contributed to low adoption of technologies such as embryo transfer since most of the aging farmers may not have access to information on the newer techniques in dairy cattle production. Smallholder farming is considered the backbone of the dairy industry in Kenya [10] unlike in developed countries where the production is in the hands of a few large scale farmers. Aging farmers should be encouraged to share farm proceeds with their youthful heirs to encourage the youth in agriculture and faster adoption of available technologies.

Smallholder farmers keep a few dairy cattle that produce an average of four (4) to ten (10) litres of milk per cow per day. Only a few of them have cattle that produce over 10 litres of milk per day. Due to the low production, they are almost classified as subsistence milk producers. Any technique that will lead to improvement of their herds has the potential of being adopted if its affordable. This will lead to efficient milk production hence improved food security and wealth creation. Most donor funded programs have been directed to this group of farmers in Kenya but little progress has been registered especially on daily average production of milk per cow. The slow progress has been attributed to poor nutrition and breeding due to low adoption of technology.

In this study, there was positive correlations between adoption and unavailability of the technology or lack of expertise. This means that as embryo transfer is made available, many farmers will be willing to adopt the technology. When experts are availed, many farmers will adopt the technology. The cost of embryo transfer was shown to be of moderate influence on the overall adoption of the embryo technology. This shows that farmers are willing to adopt the technology to rapidly upgrade their dairy herds if made available.

The combination of artificial insemination using conventional and gender selected semen together with regular embryo transfer program may provide the much-needed impetus to improve the productivity of the dairy cattle in the hands of smallholder dairy cattle farmers in Kenya. Sensitization of the farmers on the available assisted reproductive techniques and their potential is the first step on the road to achievement of 100% food and nutrition security as envisioned in the Big Four agenda and Vision 2030 of the government of Kenya and sustainable development goals (SDGs) of the United Nation.

It has been shown that biotechnology has the potential to improve the production of smallholder dairy farmers if they are transferred to them [5]. Multiple ovulation and embryo transfer can greatly increase the number of offspring that a genetically superior cow can produce [4]. The reproductive potential of a cow could be enormously enhanced considering the numerous viable ova they contain in their ovaries [5]. Through natural mating or artificial insemination, only a fraction of the reproductive potential of the cow is realized and the average cow will have one calf per year [4]. With MOET, five to six super ovulations are possible per donor per. Each super ovulation leads to an average of six embryos. Donor cows are being super ovulated more frequently than in the past, and more embryos are being produced per year [2,13] in countries that using MOET.

Attempts could be made to bridge the gap of inadequate number of heifers by incorporating the old technologies like AI with these newer biotechnologies like MOET, Invitro Embryo Production (IVEP) and gender selection of semen (sexing of semen) [5,6,14]. The cattle industry will also benefit through the use of bulls produced through such a MOET programme for rapid genetic improvement through artificial insemination. Embryo transfer is a technique that remains underutilized in developing countries despite the potential to transform the livestock industry. This is despite the commercial embryo transfer being available over the last 40 years [13].

CONCLUSION

Dairy cattle production is a viable investment that many smallholder farmers have opted to embrace. Lack of replacement heifers or non-affordability remains a threat to improvement of this subsector. Biotechnology adoption is a suitable choice for further improvement of livestock production. Lack of awareness and non-availability of trained embryo transfer personnel need urgent intervention. With proper use of the available assisted reproductive technologies and record keeping for ease of evaluation of breeding progress, it's possible to bridge the milk production gap. Capacity building of embryo transfer technicians is key in the transfer of this technique to the breeders. Food and nutrition security remains a big challenge in Kenya and adoption of such appropriate technologies is of paramount importance. With regular use of a combination of assisted reproductive technologies including embryo transfer, shortage of quality and affordable breeding heifers will be bridged.

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Ethical approval: "All international, national and/or institutional guidelines for the care and use of animals were followed. All procedures performed in studies involving animals were in accordance with the ethical standards of the University of Nairobi."

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Oil Rents Management and Distribution In the Global South

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ABSTRACT

This paper investigates fiscal policy options and regulatory framework for harnessing resource rents from the oil industry. The aim is to demonstrate that for the nations of Global South to benefit from oil industry they have to adopt mechanisms of progressive extractive rents regime, better policies for oil resource funds, and regulation and proper control of state-owned enterprises. This has been a demanding task for the nations of the South due to weak pre-existing institutions, lack of implementation of fiscal rules and lack of political good will. Through a review of the literature, this paper concludes that developing states should focus on crafting country-fit fiscal policy decisions in revenue management, ensuring transparency and accountability in the institutions that convert the oil rents to sustainable development outcomes.

Keywords: Management, Fiscal, Oil, Revenue

INTRODUCTION

There is an uneven distribution of non-renewable natural resources on earth. They are placed on different poles of the earth crust haphazardly, and this random spread results in unequal distribution. These resources are part of a massive wealth of many economies, and their management can have either positive or negative impacts on the social, political, and economic development of a country. Oil is some of the unique underground assets that are subject to volatility, exhaustibility and large enough to cause economic damage if not well managed. According to the resource development experts like Collier and Sachs, the impact of these resources have far-reaching consequences on the economic growth and development of nations in the Global South (Collier & Venables, 2011; Soros, 2007). Too often, resource-extensive countries in the developing countries have been unproductive in exploiting the transformative value of own natural resources. These resources generate streams of revenues; as a consequence, there is a need to manage and distribute them in a different way from other categories of revenue regime.

Collier (2013) points out that many past resource booms in developing countries had left the economy in an almost worse situation than before the discovery. Bilal (2013) adds that adverse effects of resources in these nations have been due to poor governance and weak institutional arrangements. Bilal contends that (mis)management of income streams from natural resources plays a vital role in determining whether the rents can yield riches or it can turn out to be a 'curse'. It is therefore of requisite to understand the national context as well as international factors that tended to reinforce these adverse propensities. Stiglitz, Sachs, and Humphreys (2007) explored that countries with a large endowment of natural resource tend to perform poorly than non-resource nations. Paradoxically, such capability often hinders development outcomes. On the contrary, economies with fewer resources have achieved sustainable development. The East Asian Tigers like Taiwan and Singapore has had rapid growth economic growth based on booming export of manufacturing sectors. (Ibid)

The study proceeds as follows. It first situates the theme of extractive sector in the South in the existing literature. The paper then delves much more into the fiscal policy arena and regulatory framework for harnessing revenue into sustainable development. Finally, it offers some reflection on oil revenues, drawing on general conclusions about the significance of good policy responses and regulatory arrangement in enabling sustainable resource use in developing countries.

METHODOLOGY

This is desk-based research. This study is based on the review of relevant literature on government official documents, organizational documents like World Bank, academic and non-academic articles, gray documents and other studies in the region on oil and gas revenue management, institutional and fiscal regimes across the globe.

Review of extractive industry in the Global South

The Global South, the emerging economies of Third World (Africa, Latin America and the developing countries in Asia) is known for its endowment with abundant sub-soil resources, which can be a multiplier to its domestic economy and consumption at the global scale. Extractive sectors are those sectors that deal with exploration and extraction of exhaustible sub-soil assets in oil, gas and mineral ores sector. For instance, 66% of minerals used in electronic industry originate from Africa, and over 50% of worldwide production of coal comes from Latin America. Additionally, Asia hosts more than 33% of global mineral ores used in steel and energy industries (Besada, Lisk, & Martin, 2015). Intuitively, these resources provide for broad-based and long-term sustainable development for the country. Tapping these benefits has been a dilemma for many countries in the Global South.

Unlike the countries in the Global North like Norway and Canada, which have made tremendous use of revenue from its oil or other resources, Global South countries have suffered from what economists call 'resource curse', a situation where the resource flow into the economy hinders growth and development. The nature of resource extraction regime causes this disparity. The regulatory framework for resource extraction in the developing countries is formulated to serve the interest of the multinational companies working on the extractive sector and a section of elites instead of providing employment and welfare for the citizens (Campbell, 2009)

THE OBJECTIVE OF THE STUDY

The policy paper aims to assess fiscal policy options and regulatory frameworks in the management and distribution of oil rents in the Global South.

The oil industry is few policy-making arenas in the economy in which a country can yield maximum return from good decision-making and disastrous consequences for poor decisions. Amid these choices states make is the design of tax regime. As discussed by Collier and Venables (2011) a well-designed taxation regime is suitable for the investor and the state due to the nature of changing prices of oil in the international market and depletion properties of oil or/and discoveries made.

FISCAL REGIME DESIGN

Oil sector provides many benefits to the population through employment, revenue extraction to local content. Taxing resource wealth is an uphill task for the resource-dependent countries of the Global South. The process of revenue extraction starts at exploration and allocation stage of the resource value chain. Realising these rents requires well-designed fiscal regime that needs to incorporate government capacity, information between government and potential

investor and unpredictability in the oil industry. The choice of the fiscal system requires administrative arrangement and scrutiny on the entity of the government entitled to manage the wealth, Mayorga Alba (2009) and understanding of the political economy of the country (Barma, Kaiser, & Le, 2012). At the exploration phase of EI value chain, petroleum laws as defined in other countries state the nature of the specific commercial terms in contracts regarding the division of revenue. All income streams and payments like taxes, royalties and bonuses must be adequately accounted for by the regulating state entity. The sale of oil products follows clear and arms-length procedures as stipulated in the sectoral law or as indicated in the contract law to ensure efficient management of the resource earnings.

According to Natural Resource Charter, Daniel, Keen, and McPherson (2010), fiscal regime is a set of instruments that stipulates how the state and the investor share the rent flow from oil sector. These budgetary tools include royalties, dividend, corporate taxes, bonus, resource rent tax and surface rents payments. The state may have its preference of the fiscal rule, but they also need to put the interest of the investor into account. The volatility nature of oil earnings calls for the establishment of stable financial policies and development of spending plans (Sy, Arezki, & Gylfason, 2011). In a nutshell, the design of fiscal regime should consider both the government take as well as investors take.

REVENUE COLLECTION

The ability of the state to efficiently collect rents depends on the choice of fiscal regime, the capacity of the institution delegated to capture the revenues and compliance to the internationally accepted framework of accounting. Mayorga Alba (2009), demonstrates that verification of information on the volume of oil produced, export market prices and the amount received by the seller will help in the compliance of international standard procedures, which are unique to EI. This regulation simplifies resource rent assessment and curbs gross misinterpretation by bureaucrats. Bearing in mind that these resources are volatile, exhaustible and that resource extraction implies depletion in the long-run, the government need to have distinct revenue collection method (Daniel et al., 2010).

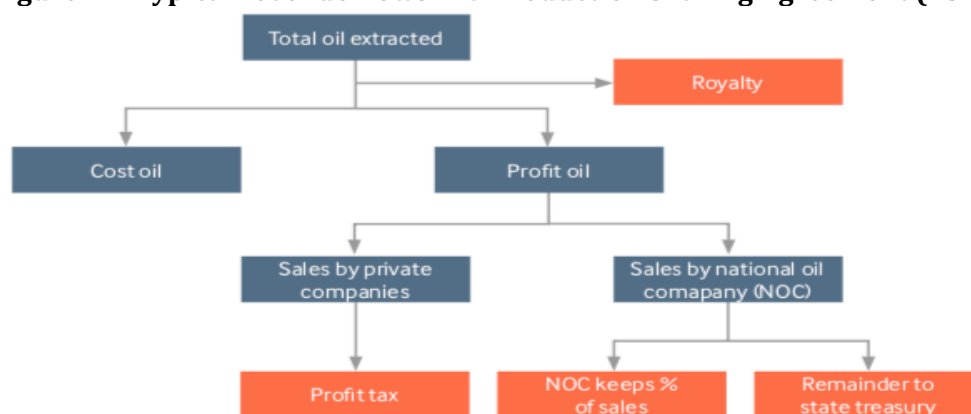
The management of oil rents is the fiscal arrangement between the oil-producing countries or National Oil Company (NOC) or entity of the government delegated to capture rent and the investor. Daniel et al. (2010) discussed two regimes of granting rights to an investor. First is the concessionary term, started in the mid-1800s, which gives the company ownership over the extracted resource. The Organization for Economic Co-operation and Development countries like UK, Norway, and Canada practice concessionary regime. The second design is the contractual regime, which grants private investor the ownership part of the oil produced while the state retains control and participation in ownership and decisions making. The most common form of contract regime still at large in Global South countries like Angola, Kenya, Nigeria, and Azerbaijani is the Production Sharing Agreements (PSA). Due to the many financial tools present under a different regime and their variation in terminology and legal framework, PSA arrangement will be the primary focus in the section (Karasalihovic-Sedlar, Barbir, & Brkic, 2017).

Under PSA, which is mostly applicable to hydrocarbon sector, a certain percentage of output, customarily called, 'cost oil' is put aside for the investor. The cost oil covers the cost incurred by the company in its extraction stage. The government and the company share the portion of the output, which is the 'profit oil'. Despite these various nomenclatures in fiscal regime, the oil-producing country takes risk and timing of revenue receipts in a way that is line with countries development plan and ensures optimal value for the welfare of the citizens. A progressive tax regime is best practice for resource-endowed nations. Due to high uncertainty,

volatility of the global oil prices, the unpredictability of oil wealth, as well as political climate of developing countries, the government need to adopt the progressive tax regime (Barma et al., 2012). Progressive design is usually a 'good enough' practice for the South countries due to its ability to curb regulatory capture and revenue leakage (Ibid).

To ensure public confidence and clear rules of accountability the government and the company should publish the benefit accumulated from resource extraction and account for it in the state budget. Regular review and reconciliation of the investors and treasury accounts will further enhance transparency as well as strict observance of international accounting ethics (Mayorga Alba, 2009). In conclusion, to this, the economic philosophy for oil rent extraction implies that the use of sub-soil assets in the economy needs to fit a country situation. There is no notion of the best-fit model oil industry. As shown in Daniel et al. (2010) there is nothing like "Norwegian Model" of wealth resource extraction, Norway developed high profile Petrol Fund long after the discovery, close to 30 years. The proposition is that Global South nations should not transplant policies and framework but rather design a country-fit fiscal regime that is simple, feasible and transparent while putting into consideration the government aims and also the nature of the political landscape.

Figure 2.1 Typical revenue flows in a Production Sharing Agreement (PSA)



Source: (Natural Resource Governance Institute)

The orange boxes indicate oil rents flow to the state. The percentage retained by NOC and the amount of revenue submitted to the state treasury is enshrined in the legislation or/and as agreed in the contract, based on the nature of the project. In some countries, there are petroleum laws specific to the industry while in some there is general legislation relating to these fiscal instruments.

DRAWBACKS AND LOOPHOLES

Fiscal instruments are the means for capturing earnings from oil and gas sector. Just like many taxpayers in other economic activity, foreign companies can try to evade tax obligations. As both the state and investor endeavor to get a fair share of this wealth, Daniel et al. (2010) argued that an intense political contestation may take place where political dogmas surpass the development agenda accompanies the sharing of oil revenue. According to Natural Resource Governance Institute Reader (2015), the investors can evade tax payments through:

- ❖ **Transfer pricing**- this takes two forms. Firstly, the investor company sell its oil at low prices to its sister company in their home country to reduce taxable income in the operating region. Secondly, the subsidiary company operating in the resource-rich nation may buy products and service at inflated prices. This over-invoicing will increase the company's cost thus reducing their declared profit. A recommendation to overcome

the dangers of 'formal cheats' is by using global market price for tax purpose rather than relying on the receipts proclaimed by the multi-national enterprises.

- ❖ **Productions costs**- this occurs through fraudulent accounting. Increasing production costs commonly referred to as gold plating in extractive taxonomy. The state can minimise this risk through developing rule regarding efficient production and auditing of the company's expenditures on the production processes.

This section concludes that fiscal regime has to be designed to fit the country context. The framework of a fiscal structure has to seal the loopholes that come with different regime type. Design of fiscal regime itself does not make proper management of oil rents; therefore, there is need to illustrate how management of resource funds is done explicitly. The next piece of discussion will deliberate on public investment management of oil revenue.

NATURAL RESOURCE FUNDS

Oil industry injects enormous revenues into the economy. If not well governed and managed these income streams can damage the domestic market as well as foreign exchange market. A percentage of these rents are used for the development of infrastructure, environmental protection, provision of essential public utilities like health care and increase human capital. Other countries may choose to spend their resource fund in foreign financial assets and packing them abroad in wealth fund for their future generations. Whether a state decides to invest in the economy or elsewhere, transparency and accountability of the institutions mandated to that operation are essential. Through appropriate governance mechanisms, oil revenue provides avenues for a country for the furtherance of their strategic plans and achieves development goals.

PUBLIC FINANCIAL MANAGEMENT

The previous section focused on the overview of natural resource funds and fiscal rules, and realistically strategic interventions cannot operate in a void. There is an institutional arrangement to ensure policies come into effect. This section argues that pre-existing institutions status merged with weak and unstable fiscal mechanisms have resulted into underdevelopment of resource wealthy nations of Global South. For these countries, it is not the question of how to save but rather the kind of investment decisions. If the government choose the options of investing in public infrastructure, it is essential to check the quality of investment management to achieve sustainable development results. Low-income countries are capital scarce; it is, thus, the role of the state to come up with an investment strategy and financial discipline to invest in human capital and physical infrastructures like road, airports, and harbours. For such an investment to achieve high social returns, the state requires investing in their capacity to spend, Sy et al. (2011), which requires appropriately managed public investment.

In resource-rich countries, the government has used different mechanisms for management of oil revenue. For example, budget legislation controls complemented with additional legislation in Norway and Alaska oil income stream, Sao Tome and Principe and Mauritania used the organic law adapted to their needs and capabilities as enshrined in their constitution to curb patronage and rent-seeking (Cangiano, Curristine, & Lazare, 2013). States have used different institutional framework like particular treasury account for oil rents; others have used the separate entity to manage resource funds and management of resource fund off- budget. The public investment management in this section dwells on investment and oversight bodies.

Hands-on experience across oil-producing countries have shown that political interference as well as public pressure to use the fund both in developing and developed countries weakens

the effectiveness of resource funds (Cangiano et al., 2013). Stevens and Mitchell in Cangiano et al. (2013) for instance, pointed out that, in the Canadian province of Albert, government bureaucrats aspired to change the rule governing the management of Albertan Heritage Fund. Aforementioned indicates the level of political interference of resource funds. In this regard, it is essential for the state to institute a body with a mandate of shielding public fund from patronage and insatiable government officials. The creation of these bodies enhances effective decisions making of resource use and insulating the fund from politicians. Effectiveness only occurs when such institutions are independent and free from political pressure.

In some cases, the establishment of oversight bodies as an addition to the already existing layers of mechanisms in resource fund management improves investment decisions. As discussed by Cangiano et al. (2013) there are several layers of such oversight authorities in many countries. Sao Tome and Principe merged two options in fund supervision, the joint operating between civil society and the state, the Petroleum Oversight Commission which enjoys judicial and investigative powers and secondly the mandatory auditing of oil fund by an internationally well-known accounting firm. These measures are implemented to ensure prudent management of fiscal policies and development of a sound framework for the management of oil wealth. Nevertheless, this framework is not a panacea to the management of resource fund. It posed diverse challenges for the nations of Global South. Low-income countries lack skilled human capital in the management of such funds, and also institutional deficit represents a more significant problem to the operation of such bodies. In some extreme cases, there is a conflict between various authorities where law and legislation did not correctly define their roles often resulting in dual operation of oil budget and asset management.

Investment in different commission and oversight authorities may ensure prudent management of oil rents. In the context of Global South countries, most of the oil operation from upstream to downstream sector is under the control international oil companies. This operation calls for the establishment of a state-owned entity to oversee and control the management of oil income streams. Succeeding sections expounds on this institutional arrangement putting into consideration the role national oil companies plays in management and distribution of oil rents.

A succeeding chapter addresses the issues of how national oil companies participate in the oil rent management. It reviews the rationale for state participation in the oil industry; the role played by SOEs backing up with country context models and discusses drivers behind state participation. It concludes with challenges of NOCs and comments on the recommendation for the future of Global South countries.

STATE-OWNED ENTERPRISES (SOEs)

Who holds the most significant share of world's 'black gold'? Instinctively people think the most considerable part of the oil is in the hands of multinational oil companies like ExxonMobil, BP, and Chevron. However, 70% of world oil reserve is managed by a state-owned entity without private shareholding, and thirteen national oil companies control more reserve than the largest oil company, ExxonMobil (Rosenberg, 2007). Rosenberg continues to argue that demands of nationalisation are expected to increase due to exhaustibility of oil in developed nations that host most of the IOCs and breakthrough in oil sector Global South. For an extended period, petrol sector has been strategic importance in the developing and developed countries. Consequently, they need state participation and control. Oil is among the commercial industry identified by Vladimir Llyich Ulyanov as the "commanding heights" of the economy that demands full state autonomy (McPherson, 2008). The move towards

nationalisation in oil sector started in the 1920s with the development of national oil enterprises from Latin America countries. The idea of state participation gained momentum in the 1970s with demand for nationalisation and confidence in the benefits of state control and tenure. (Ibid)

RATIONALE FOR STATE INVOLVEMENT IN OIL REVENUE MANAGEMENT

The state can be a medium for transforming oil income streams into sustainable development through building of infrastructures to being a centre for training experts and technocrats in the petroleum industry. In other countries particularly the developing countries, the national oil company has become a loophole for syphoning rents, discouraging foreign investors and diverting revenues meant for development into private conduits. This mix of benefits and adverse impacts that accrue to nationalised oil sector has called for an explicit understanding of the mandate of SOEs. To avoid conflict of interest and hindrance to revenue maximisation, and subsequent fall of nationalised oil company there is need to stipulate functions of the enterprise, define the limits of its operations and use of the revenue and above all insulate this sector from politicians. This section will examine the commercial and non-commercial roles of the NOC and closes with some successful proposals that may enhance the decision making of state oil company.

The nationalisation of oil companies is vital in improving the revenue for the development of the economy and welfare of the citizens. According to Natural Resource Governance Institute, the proponents of government ownership of natural resource mention three principal benefits of such operations; capturing of rents, development of domestic linkages between the oil sector and other industries like agriculture and finally the diffusion of technology and best business practices to the local economy.

Despite these opportunities that arise with the nationalisation of oil companies, it poses a significant risk to the economy if its role is not clearly defined. The commercial purposes of the NOC according to Heller, Mahdavi, and Schreuder (2014) as the name suggests, can be described as the involvement of state entity in the economy of generating rents from the extractive industry. They further argued that roles of this entity in capturing rent from oil often ill defined. These moneymaking roles include leading financial positions in the execution of exploration operation at the upstream stream sector, the sale of government oil as well as marketing of fuels and its refined products. For the high-performing state-owned extractive enterprises like Norwegian Statoil and Saudi Aramco, these mandates are specifically and strategically defined in their NOC company documents. Those large state-owned companies engage in massive operation just like international oil companies, for instance, having projects in the global market.

For the developed nations like Norway and Saudi, the state and the company designed well-articulated financial documents in a business-oriented way to target the market and also to accommodate changes as the company progresses with time (Heller et al., 2014; McPherson, 2008). The company directors and shareholder, and oversight authority defined the contents of the commercial paper. For instance, Malaysia Petronas invested in the international market in areas perceived as risky by other companies. On the other hand, companies specifically those from the nations of Global South like GNPC (Ghana) and Timor Gap in Timor Leste has a narrow scope of commercial operation, limiting themselves to minority shareholding and sale of the government share of oil (Heller et al., 2014). All these variations occur due to lack of transparent governance, roles and strategic path for a profitable portfolio.

Outside the demand to unpack enterprise's profitable path, it is prerequisite to accurately describe non-profit-making roles which Ralf (2007) and Heller et al. (2014) divided into two principal mandates. Firstly, regulatory functions which state the rules of licensing rights, provisions about the performance of the company, regulation of contracts and tenders and observance of sector regulation by other companies. Secondly, the quasi-fiscal roles defined as other operations carried upon by NOC when called, for example, building of infrastructure, fuels subsidies, and servicing public debt.

The liability of the state-owned enterprises to undertake commercial and non-commercial roles is a factor of what it can retain from the oil income streams. Countries in the South capture part of the revenue through taxation, royalties, selling state share of petroleum and bonuses paid by the foreign entities. To pursue their commercial roles, these companies need access to finance to continue with their linking strategies. In developing nations, giving full autonomy to the NOC to manage such a massive amount of fund is a risky operation primarily in the face of institutional weakness and governance deficit coupled with weak public financial management. Enacting mechanisms that balance these risks is crucial. There is no universal model suitable for oil-producing nations to follow regarding management of SOEs but Heller et al. (2014) proposed several recommendations of which I will focus only on two proposals. The twin suggestions are the dilemmas faced by NOCs in developing countries.

First is the political interference in technical decision making within the realm of SOEs. McPherson (2008) points out that the global significance of SOEs has issues and abuses especially from political economy that discourages its growth and encourages its failure. He continued to assert that policy response that would lead to state withdrawal in the involvement of oil economy would have severe consequences in the long run. In the developing countries, as argued by Kim (2017) there is no separation of management of SOEs from the ownership as ruling party controls the enterprise. Therefore, entrusting key decision making roles to independent management and committees would allow the entity to build a lucrative long-term portfolio.

Leadership is vital in the management of revenues and insulation of useful technical teams is a call for excellent performance and accountability (Heller et al., 2014). Highest performing enterprises like Norway's Statoil has politically autonomous management team hired through rigorous, transparent processes. Investment in human capital is an antidote to poor governance and administration. Developing high calibre professional staffs is stringent move to safeguard the company from politicised decision-making (Ibid). Saudi Aramco is one of the world-class management and training centres for the oil engineers and managers that being an "Aramcan" is a high-status job in the Gulf region.

The second recommendation is the promotion of transparent and oversight authority. Many NOCs countries in the Global South face challenges of opaque and unaccountable institutions due to unsatisfactory performance. There is need to publicize information on the financial operation of the entity promptly. According to Heller et al. (2014), SOEs should face same disclosure of information just like in the case for private companies. The information that is important for publication includes revenue collected, accounting of the fiscal relationship between the NOC and the government, the amount spent on non-commercial operations, debts, entity budget, report of oil sales and corporate structure. This public disclosure of information will enhance the confidence of international investor in the oil exploration and production as well as other linking industries. A prime example is the Malaysia Petronas in 1993-2010 through its financial openness boosting external investment of more than \$19 billion in bond, which will further support financing of long-term development projects (Lopez, 2011).

In addition to the publication of SOEs financial documents, effective legislative oversight, independent audit and transparency practices are some of the most useful tools for ensuring corporate governance in state-owned enterprises. As a vehicle for overseeing the functions of SOE, Heller et al. highlighted the need for the legislators to have knowledge of company's activities and annual reports as well as revenue envelope available for the budget. The effects of legislative control depend on the professionalism where members are well versed and have adequate skills in oil sector revenue governance, and free from partisan concerns. The incentive for reliable performance and excellent governance practice is independent accounting standards, which boost investors' confidence. Subscription to the global standards of the Extractive Industries Transparency Initiative (EITI) is a corrective mechanism to expose the state-owned company's illegal practices, and shady deals; successful in engaging in this transparency initiative is Colombia's Ecopetrol.

Despite this wave of nationalisation of oil companies and the vast recommendation to improve their corporate governance and management, SOEs in the Global South operates behind a curtain. There is high-level political interference, lack of explicit mandates and unclear separation of powers between who owns the company and who manages it, leading to a conflict of financial and social goals as Budiman, Lin, and Singham (2009) put it. Notwithstanding hard economic times, SOEs has potential to improve its governance and undertake lucrative revenue management mechanism.

Extractive sectors can have significant effects on the economies of resource-extensive countries of Global South if the management of revenue streams is streamlined. These countries are far from achieving this because of poor governance, weak fiscal regime, and lack of transparent state-owned enterprises. For effective management of oil revenue, the state requires actions of various institutions ranging from, policy focus, political to a partnership between different stakeholders. At the policy level, these nations should move away from the narrow perspective of considering oil industry as an enclave sector, towards a well-integrated approach that focuses on linking with other local and manufacturing sectors. Within the political realm, commitment from politicians and observance of principles of good governance is fundamental to curb elite capture and focus on broad-based economic transformation.

Utilizing the perspective of oil sector for the development of the country is among the primary concern of Global South. Resource-rich developing countries should strike a balance between maximising resource value and minimising the harmful effect of the resource. As Besada et al. (2015) point out, there is a need for innovating policy options in the areas of resource tax, royalties and other useful decisions for generating sustainable rents. Coupled with transparency, accountability frameworks and corporate reforms in oil economies can achieve development aspirations of developing nations.

CONCLUDING REMARKS

Oil producing countries in the Global South encounter challenges associated with oil rents flow into the economy. Due to these problems in oil rent management and distribution in developing countries, policymakers need to come up with effective fiscal policy measures to realise development outcomes. In developing countries, such as those in Africa, Latin America and Asia, undesirable effects of oil revenue is widespread. Inflexible and fragile taxation regime, mismanagement of resource funds due to the weak institutional arrangement in resource investment and additionally, ill-defined roles and responsibilities of state-owned enterprises are all compounding factors in the mismanagement of oil revenue.

Resource development experts in the oil industry and organisation like Natural Resource Governance Institute suggested various fiscal policies and diagnostic framework moderate the adverse effects of oil income streams into the economy. However, these recommendations for oil rents management in the Global South face problems from political influence, lack of skilled labour and governance deficit. Succinctly, oil sector reforms start with the end in mind. A need for overarching integrated plans that would last beyond the exhaustion period of the oil well is essential for sustainable development. Suitable fiscal policies in oil rent management and distribution rely on principles of good governance, stable institutions reinforced by better public investment management

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When a Virgin is not a Virgin

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ABSTRACT

My fascination with the *Pythia* began several years ago when I was writing a paper on different ways of knowing. Although the *Pythia* is surrounded in myth and has been written about by numerous authors both in the past and present, it seems to me she still has a story to tell which has not been touched on before. The *Pythia* was the priestess at Delphi and among other things, she had to be a virgin (*pathenos*), or at least originally. We also know that inscribed on the forecourt temple of Apollo was the maxim "Know Thyself". When we put these aspects together with the non-denominational method of meditation used by early cults in the Mediterranean area and other parts of the world known as Prayer of the Heart, a different meaning of the word *virgin* starts to reveal itself. This also suggests that these priestesses might have been mystics trained in an esoteric tradition, which leads to Self-discovery or the Godliness of humans.

Keywords: Pythia; Delphi; Ancient Greece; virgin; Know Thyself; Prayer of the Heart; intuition; female principle

INTRODUCTION

The oracle neither conceals, nor reveals, but indicates.
(Heraclitus, in [1, p. 9]).

My fascination with the *Pythia* began several years ago when I was writing a paper on different ways of knowing. *The Pythia* was who pronounced the oracle at Delphi and among other things, she had to be a "young virgin" (*pathenos*), or at least this was said to be the case originally [1]. Actually the term *Pythia* does not apply to one woman, but a "sisterhood of mystics" [2, Prologue] and it was these women who were the pronouncers of oracles in the name of Apollo who made Delphi famous.

In the account I relate here it is difficult to discern between fact and fiction and probably we never will, because it also depends on who is telling the tale and what aspects of it they want to highlight. Nevertheless, reading between the lines, slowly a picture starts to emerge. In this article, among other things, I share some of the myths and stories surrounding Delphi and its history, Apollo, the *Pythia* and her history, the object of heart based-spiritual meditation practices, their relationship to *virginity* and their connection with the maxim *Know Thyself*.

DELPHI

Although the place is shrouded in mystery, Delphi too has a tale to tell. Early myths indicate that the site was also a place of prophesy in pre-classical times when it was a "mystical sibyl who presided in Delphi. Her title, 'Sibyl', means prophetess or 'one who sees', and comes from the Greek word *sibylla*" [3, p. 30].]. The sibyls were considered to have been born between man (humans) and the goddess, and therefore be semi-Divine. They were found throughout Greece and known for their prophetic insights [3]. Michelangelo included the sibyl in his painting on the ceiling of the Sistine chapel as the figure who pronounced the coming of Christ.

Originally, Delphi was connected with the Earth goddess or Gaia and the place was known as Pytho, which was named after the great serpent who guarded it. In goddess worship the python was the symbol of rebirth and regeneration and was considered the son of Gaia. Broad [in 3] maintains the Mycenaeans settled in the Delphi area on Mount Parnassos and cared for the shrine for more than five hundred years. Gaia along with other goddesses such as Themis, Aphrodite, Artemis, Leto, Pandora, Selene, Hera, Athena, Demeter, Persephone, and Rhea were highly revered in the pre-Olympian era and were associated with "order, wisdom, protection, and the life-giving processes of fertility, which were intimately tied to seasonal changes" [3, p. 30]. In a time line of Delphi, worship of Gaia at Delphi seems to have taken place between 1700-1400 BC [4] but this could be later as the *New World Encyclopedia* [5] gives the Mycenaean period as lasting between 1600-1100 BC. The goddess tradition was oral and when it was replaced by invading patriarchal societies, the myths got wiped out or retold and transformed to suit the new tradition. The name *Delphoi* comes from the same root as *δελφύς delphys*, meaning "womb" [6].

APOLLO

In places like Delphi, the divine source of prophecy, inspiration and knowledge also changed with each invasion. In Delphi the masculine Olympian God Apollo replaced the earth Goddess and the semi-divine priestesses were also replaced by human oracles who became known as the *Pythia*, which comes from the Greek word *pythein* meaning "to rot". This referred to "the stench from the body of the Python, which arose from the fissure Apollo had thrown the slain serpent into" [3, p. 33]. Prior to Apollo becoming associated with Delphi, Themis, the daughter of Gaia, was said to take over from her mother and deliver oracles there. Later Phoebe, her sister, took over peacefully from Themis, both being Titans (Aeschylus in [7, para. 4]).

Apollo was patron of Delphi. He was the oracular god through which the *Pythias* uttered their prophecies. In art, he was represented as the ideal of a *kouros*, a beardless, athletic youth who was either naked or robed. His character was dual in nature for he could bring death, terror, and awe with his symbolic bow and on the other hand, transport one to the joy of communion with Olympus (the home of the gods) through poetry, dance and music, the lyre being the instrument with which he was most associated [8]. Apollo is connected with the Delphi by his epithet *Δελφίνιος Delphinios*, "the Delphinian" which in turn is connected with dolphins. The word dolphin comes from the Greek word *δελφίς (delphís)*, which is related to the Greek *δελφύς (delphus)* meaning "womb" [9]. The first priests Apollo was said to have appointed, were sailors coming from Crete [10].

CONDITIONS OF WOMEN DURING THE CLASSICAL PERIOD

Here I take the classical period to be a "conventional shorthand for the history and culture dominated by Greek and Roman influences for a couple of thousand years. It's an arbitrary division of world culture, and further complicated by our current popular inability to disentangle Greek from Roman, much less Carthaginian, Parthian, or Celtic strains" [11, para.7]. At that time, in public discourse in Greece a woman had no voice of her own for she was supposed to be silent and thus in politics and power lacked any right to be heard [12, p. 27]. However both in ancient Greece and Rome, side by side with the philosophic and mathematical way of knowing as expounded by Pythagoras, we find places where women as a "sisterhood of mystics" [2, Prologue] were the pronouncers of oracles. Ironically, therefore, the greatest authority of ancient Greece was a woman [2, chap. 1] and the most famous site was Delphi.

HISTORY OF DELPHI

The use of the site at Delphi probably goes back to about 1,400 BC or even earlier and later fell into disuse until, during the classical period, the followers of Apollo adopted it again [6]. The sanctuary under Apollo was active from late eighth century BC to fourth century AD - a history that lasted over one thousand years [1]. The Christian emperor Theodosius I finally silenced the oracle in 392 AD when he ordered pagan temples to cease operation thus prohibited the cult of Apollo and the celebration of the Pythian games in honor of Apollo [13]. The vast temple was officially closed in 393 AD.

THE PYTHIA

The story goes that Zeus sought to find the center of his "Grandmother Earth" or Gaia. He therefore sent two eagles flying from the eastern and western extremities, and the path where the eagles crossed was considered the *omphalus* or navel of Gaia [14]. Apollo, in order bring in a new tradition to this site, is said to have slain the python, the great she dragon that protected the earth's navel [15]. As described earlier, during Apollo's *reign*, the priestess or virgin was known as the *Pythia*.

It is difficult to know exactly the questions given to the *Pythia* and the responses she gave as reports of these often occurred long after the utterances took place. In addition some of the reports come from people "hostile to pagan religious practices such as the Christian writer Eusebius" [1, p. 11]. Often writers used the story to illustrate their own narrative, and in this sense they were not exact. For this reason Park and Wormell [16] maintain that there is no oracle to which one can point with absolute confidence in its historical authenticity. We also do not have a straightforward account about how a consultation with the oracle at Delphi took place. Sources that do discuss these topics date from Roman times (first Century BC to fourth century AD) when the shrine was already past its heyday. References from the classical period treat the process as common knowledge and Delphi was often used as a short hand for what happened in other oracular sanctuaries [1].

The *Pythia* or virgin was said to sit at the opening of the cave on a small stool, which was perforated with small holes. She kept her legs wide apart and maybe this was to allow the fumes from the cavern below to enter her womb. As we have seen the etymology of the word Delphi comes from the word meaning "womb". And here we must stop to investigate the meaning of the word *virgin* and also what the *virgin* was said to be doing or from where the wisdom she was pronouncing was said to be coming. In the case of the *Pythia*, virginity, according to Beard [12] "ensured her openness to Apollo, and (like a perfect bride) to him alone" (p. 31). In reviewing Sissa's book, Beard [12] points out that

there is more here than strange notions of female physiology... and that the role of the Pythia highlights an inextricable connection between the 'woman's voice' and sexuality, between 'the mouth that speaks and eats' and the 'mouth' of the vagina. Sissa's book is a subtle exploration of the woman's body as a vehicle not just of divine prophecy but also of human speech (p. 31).

Beard [12] feels later that she might have overplayed or "been too enthusiastic about the different mouths of the Delphic priestess" (p. 285). I too feel that this is just one of the possible levels of meaning but that there are many others that also need investigating, especially if we are to understand how the *Pythia* indirectly or even directly affected European history over the next 2,000 years, including science, the nature of reality and different ways of knowing. Certainly 'her voice' or the voice of the *Pythia* was heard all over the Greek colonies of the Mediterranean and her role as a social catalyst was as acclaimed as the hidden wisdoms she expounded [2, Prologue].

According to Beard [12] the *Pythia* needed to be somebody with the vaginal tract open. This to me suggests that the use of the word *virgin* does not depend on whether the *Pythia* was sexually chaste or not. This is consistent with the records that indicated the women chosen needed to be from Delphi, of sober and good character and could be married although on assuming the role of the *Pythia*, her marital responsibilities stopped [16]. Plutarch, who served as a priest during the late first century and early second century CE, maintained that in previous centuries, there had been three *Pythias*, two regular and one understudy. She committed herself to strenuous exercise and chastity and she wore the dress of the original virgin (Plutarch in [1]). The story goes that Echerates of Thessaly fell in love with an early *Pythia* and carried her off and raped her - hence the Delphians agreed that the future *Pythias* be 50 years or older but the *Pythia* should continue to wear the dress of a maiden in memory of the original virgin prophetess. The women could have been wives and mothers but they withdrew themselves from these roles to perform the role of the *Pythia* [1, p. 13]. According to Plutarch in his day the woman chosen was from the soundest and most respected families but not necessarily the noblest and could come from a poor peasant home as long as she had lived an irreproachable life (in [1]. According to him, the *Pythia* fulfilled her prophetic task "artlessly and without special knowledge or talent" (Plutarch in [1, p.11]) Once chosen the role of the *Pythia* was for life. There seems to be some controversy whether the oracle of Delphi actually predicted the future or just gave guarded advice. The cryptic answers to questions seem to support the latter, but more scholarly research is needed to confirm this.

The *Pythia* was available for prophecy one day a month for nine months for the year, starting when the weather got warmer in spring. She therefore worked nine days a year. No women except the *Pythia* were allowed into the innermost part of the temple, but there were women who kept the sacred fire of laurel wood going on the inner sacred hearth [1, p. 18]. It is unclear the role the priests played and whether they interpreted what she said. It is also not clear where the person who asked the question was positioned or whether it was in writing. There are also discrepancies in how she responded with some writers claiming she entered into a frenzy through the inhalation of vapor and as a result raved which the priests then interpreted [17], whereas others claimed that she responded in a normal voice [1; 6]. This view of a mad *Pythia* is mainly from late Roman and anti-pagan sources [1]. Often the temples of Apollo were situated on geographical faults and this was no exception [12]. In modern times, investigations have revealed that two faults intersect directly below the Delphic temple. "The study also found evidence of hallucinogenic gases rising from a nearby spring and preserved within the temple rock" [18]. This implies that the trance like state of the *Pythia* might have been drug induced.

THE TEMPLE

The temple itself was a vast complex situated on the southern slopes of Mt. Parnassos. The temple to Apollo was built three times. The ruins we can see today date back to the 4th Century BC. These buildings replaced those built in the 6th Century BC that had been destroyed in an earthquake. These in turn replaced the original temple built to Apollo in the 7th Century BC, which was destroyed by fire. The temple sanctuary was large and was roughly rectangular in shape. "A sacred way lined with Monuments and treasuries wound up through the sanctuary to the Temple of Apollo itself, which housed the Delphic oracle in a chamber at the rear" [19]. Delphi was taken over by the Romans in the early 2nd century BC.

KNOW THYSELF

From Pausanias, we know that the famous maxim *Know Thyself* was inscribed on the forecourt temple of Apollo [20]. This saying is similar to a saying that is found in the Luxor Temple in Egypt- "Man, know thyself, and you are going to know the gods" [21]. The topic of

the Self is also addressed in the Katha Upanishad, India. Although there is disagreement about its date, Philips [22] maintains this Upanishad was probably written in the first part of first millennium BC. However, Indian philosophy was an oral tradition, which was passed down from generation to generation, hence its origin could be much older.

In this Upanishad the story is about Yama (or Death) teaching a young and curious boy called Nachiketa about the mysteries of the Self.

*He (the Atman) difficult to be seen, full of mystery,
The ancient, primaeval one, concealed deep within,
He who, by yoga means of meditation on his self, comprehends Atman in him as God.
He leaves joy and sorrow far behind. [23, 1.2.1.2.]*

Atman here refers to Soul or Self and yoga is meditation on one's Self. In the Bhagavad Gita it says: "Let a man lift himself by his own Self alone; let him not lower himself, for this self alone is the friend of oneself and this self alone is the enemy of oneself. The self is the friend of the self for him who has conquered himself by the Self, but to the unconquered self, this self stands in the position of an enemy like the (external) foe " [24, VI, 5-6].

PRAYER OF THE HEART (PH)

Heart-based meditation practices are about finding our origin in and beyond our hearts. The oldest known method is Prayer of the Heart (PH) and historically it has been practiced in some form or another by many cultures such as the Hermetic mysteries, the God-man in early Egypt, visions of God in ancient Judaism and early cults in the Mediterranean area. The practice in India of *atma-vichara* (enquiry into our Self or true nature) is related to this, as are the Tantrik practices of *Sri Yantra*. In Sufism the practice is known as *dhikr*, is related to devotional frenzy through the use of Divine Names. Prayer of the Heart, an early Christian mystical method, is part of the Hesychasm (from the Greek word *Hesychia* meaning inner stillness) and was later absorbed by the Orthodox Church [25].

Although the meditation method known as mindfulness has been researched extensively, not much is known about heart-based somatic focusing practices like Prayer of the Heart (Louchakova & Warner as cited in [26, p. 84]). It "is dual and non-dual, a process of self-enquiry and worship, a particular spiritual practice and a whole wisdom tradition wrapped up in one" [25, p. 35]. "Affectively in the Spiritual Heart the inward flow of intentional consciousness, attempting to grasp its own origin, is stabilized in the experience of internal intimacy" [26, p. 91]. "Sanatana dharma, the spiritual philosophy of India, suggests there is a perennial form of healing, which consists in the realization of the true, immortal and limitless nature of the Self beyond the ego" (Sri Nisargadatta Maharaj, as cited in [26, p. 81]).

PRAYER OF THE HEART, THE PYTHIA AND KNOW THYSELF

According to Louchakova [25] "Prayer of the Heart is the core of the best-kept secrets of western esotericism" (p.35). Bearing in mind the comments on Know Thyself presented earlier, I suggest here that the Sibyls and the *Pythias* might have practiced PH or a method similar to this.

I therefore present various aspects of PH and other heart-based practices, which seem to suggest that this hypothesis might at least be plausible.

- Prayer of the Heart is "a non-denominational practice . . . and can be used by seekers of any orientation" [25, p. 35]. In a nutshell, the repetition of Divine Names and the focusing of one's attention on the heart during the practice of PH, gives rise to the "direct intuition of the self " [25, p. 36]. This means that each tradition and/ or each

person can use the name of God with which they most resonate. It also means that, even when there was a change in the divine source of prophecy with each invasion, the method could still be practiced even though the name of God or the Divine Source might be perceived as being different.

- In the modern day heart-based method known as Intuitive Meditation, a vibratory sound is coupled with the breath and touch and slowly the practitioner open to his or her inner world via the heart. It involves a process of Self-discovery, which the philosopher Arka describes as a journey from the rational mind, to the emotional heart to pure consciousness [27, p. 38]. As one begins to connect with one's deeper self or soul, one's intuitive faculties open [28; 29] and one feels guided in what one knows, says and does. When the practitioner starts to surrender to this guiding force, one realizes that one's ego identity is not the doer and the more one surrenders to this intuitive guidance, the more this level of knowing increases [31]. I feel that it was from this level of knowing that the *sibyls* and the *Pythia* spoke. This does not necessarily mean that every woman who became the *Pythia*, was completely realized being, but that their level of psychic proficiency was great enough to fill the post.
- Louchakova [26] maintains that the core of practices associated with ego transcendence and contemplation of the Self is the "experimental phenomenological introspection into the living topological construct of the Self " [26. p. 82]. Meanwhile for Arka [27], the term meditation entails "serious self-pondering [which involves] the process of making profound inquiry into the depth of the soul about . . . [our] existence or how the Universe was created or the laws that governed living and non-living matter" [27, p. 29]. Arka [27] also suggests that during the process of self-inquiry we are rewinding our surface consciousness in an endeavor to personally "reverse the evolution of all that has happened to us from the time of our birth to the present" so we can re-experience the purity of our consciousness. Talking about the different levels the practitioner undergoes on this journey, Arka claims that the further one descends from the surface mind the experiences "become increasingly metaphysical and even mystical" [26, p.38]. Based on van der Wal's " [30] work concerning embryology, Lindhard [29; 31] pushes back the search for the self to the incarnation of the living being in the womb.
- This seems to resonate with the path as described by Lao Tzu. Stenudd [32], in his comment on chapter 6 of the *Tao Te Ching*, feels that Lao Tzu "allows himself some play with words" (para 1).

As Stenudd's [32] translation and comment on the text is so important to this topic, I include both below

*"The valley spirit never dies.
It is called the mystical female.
The entrance to the mystical female
Is called the root of Heaven and Earth.
Though gossamer,
As if barely existing,
It is used but never spent"* (Lao Tzu, Chap 6 translated [32]).

... The Chinese word for valley, *ku*, can be translated gorge, and the word for female (of any species) also refers to a deep gorge. The word for mystical, *hsüan*, can be translated dark or deep. So, Lao Tzu describes a dark depth, from the entrance of which the whole world springs, like a child does from its mother's womb.

The sign for entrance, also meaning gate or door, shows a swinging door, just like the one to the saloon in every Western movie. In the context of this chapter, it's an image also suggesting the gate to a woman's womb, which is certainly a birthplace of tremendous significance.

To Lao Tzu, the origin of the world is female, like a mother of any species. Heaven and Earth are rooted at the entrance to this womb, but there is a vast depth beneath the entrance, from which so much more can emerge. This mother of all is endlessly fertile. She never ceases to breed and nurture.

This mystical female is Tao, the Way. Again an intriguing imagery. The way to this primordial female leads into the dark gorge.

Tao as a mother of all, like the Greek Earth goddess Gaia, is a returning theme in the *Tao Te Ching*. Although ancient China was indeed a patriarchal society, Lao Tzu praised the traditionally female qualities repeatedly. Since the nature of Tao resembles the female much more than the male, so should people behave. Giving instead of taking, humble instead of proud, yielding instead of forcing, and so on.

This preference must have been very radical in the days of Lao Tzu. Actually, it still is.

In the last line of this chapter, Lao Tzu leaves the metaphor of the womb, although he still talks about Tao. He moves on to another aspect of it, another way of looking at it. The essence of the Way is as vague and fine as cobweb, because it's a principle, a natural law, with no substance of its own. That's why it lasts, no matter how much it is used. Like a formula. [32].

Anderson [33], in her translation of the *Tao Te Ching*, feels these poems "emphasize the feminine mysteries and esoteric elements" which were prevalent around the 11th Century B.C. In agreement with other scholars, she feels that the oral tradition on which these poems are based, come from that era. In her translation of the above verse, she directly names the womb, by saying:

"The immortal void is called the dark womb, the dark womb's gate. From her, Creation takes root" [33, Abstract].

In both these translations and reflections, it seems that the female principle is the key to the deeper layers and like the oracle it is a principle that "neither conceals, nor reveals, but indicates" (Heraclitus, in [1, p. 9]. This is consistent with Arka's Theory of the Six Main Levels of Consciousness, where the consciousness associated with heart is seen as being related to a faculty based on feeling, intuition and a way of knowing with which mothers have "naturally available and readily accessible to them" [27, p. 37]. Although Arka identifies the main layers one goes through when one follows the heart-based Intuitive Meditation method, his approach to meditation is not as specific as PH, but he leaves each practitioner to find his or her own way and be guided from the inside by his or her self or soul which the practitioner slowly discovers as he or she progresses. Although one's intuitive abilities are slowly awakened as one descends, the fifth level Arka " [27] mentions in his theory, which he call s "Heart-Soul Consciousness", is when "the laws of physics start reversing and lead you to experience many alternative realities" (p. 38). This is probably when one's psychic abilities are really enhanced.

MEANING OF THE WORD VIRGIN

According to Beard [12] Christian writers scorned the way the *Pythia* sat, "astride a tripod, legs apart, taking up the vapours of his prophetic spirit into her vagina. But that was precisely the point: the body of the *Pythia* was open to the word of god" (p. 31). This is for me a symbolic

representation, for if the *Pythia* was a true mystic, she needed neither the tripod to sit on nor the vapors of the world below, but certainly the gasses that escaped from the earth might have helped in inducing the trance state from which she spoke. After the alleged rape of an earlier virgin *Pythia*, Delphians were said to agree that future *Pythias* could be married, have had children and be 50 years or older. These later *Pythias* were then dressed in virgin's clothes. These statements seem to point to some sort of mystery behind the word *virgin* that might be obvious to some but not so obvious to the uninitiated.

In the dictionary we find several meanings for the Greek word *parthénos*/virgin which need considering:

1. young, unmarried woman; maiden
2. virgin
3. pupil
4. epithet of various goddesses most commonly of Athena. [34]

Although in the case of the *Pythia*, all four descriptions could possibly fit some of the *Pythias*, later *Pythia* needed neither to be young nor sexually chaste. However, as I have suggested, it is possible that the *Pythia* might have been a pupil of a perennial type of mystical tradition, which leads to self-discovery or the Godliness of humans. With this possibility in mind, I discuss some of the possible meanings of the word virgin in connection with the path of self-discovery. This will also clarify the last meaning as virgin as an epithet for various goddesses.

- In pre *Pythia* times when the primeval source of all creation was conceived of as female, the attributes of a woman who arrived at mystical union would be associated with the *Goddess* and have her attributes. In matriarchal societies "Gaia was considered the Primeval Prophetess, the Greek great earth mother" (Aeschylus in [35]). There are two versions of Classical creation myth, Hesiod's and Ovid's. However in both versions Gaia emerges out of Chaos and has a parthenogenetic birth [35]. "The word *parthenogenesis* comes from the Greek *parthenos*, 'virgin' more or less, and *gignesthai*, 'to be born.' It means, essentially, to be born of a virgin—that is, without the participation of a male. For a goddess to be 'parthenogenetic' thus means that she stands as a primordial creatrix, who requires no male partner to produce the cosmos, earth, life, matter and even other gods out of her own essence" [36, p. 1]. Where Gaia was worshiped, on esoteric union the worshiper would be seen as taking on her attributes and in this sense, she too would be considered as a virgin or parthenogenetic. As the Python was seen as the son of Gaia, it is possible that during this era, the esoteric pathway was a *kundalini*-based process where energy is seen as rising up the spine opening the various energetic centers or chakras [37].
- In the time of the *Pythia*, thoughts regarding cosmology had become more complex and a whole pantheon of gods had come into being with Zeus being considered the king of Gods who ruled from Mount Olympus. Whereas the female had previously been conceived of as the primordial creatrix, we find a turn about as depicted by the very unusual birth of Athena. Zeus fearing that his wife Metis would give birth to a son who would be greater than him, swallowed her after she had conveniently turned into a fly. However Metis was already pregnant with Athena, who on being born then miraculously came into being through an opening in the head of Zeus. She was fully grown ready to take up her task as goddess of war. Although there are other stories surrounding her birth, she did not have a real mother in any of them [38]. According to Harrison [39], Athena's birth can be considered as a desperate theological expedient to rid Athena of matriarchal conditions. By having her born from Zeus, it gave males authority and power over something that had previously only been a female realm [38]. Sometimes Athena is known as Pallas Athena, which refers to her condition as a virgin.

She was also known as the goddess of wisdom and of essential knowing and logic. She was the guardian of cities and Athens is named after her. Although she was the goddess of war, this was more about good tactics and winning strategies, not just fighting, like Ares [38]. This aspect of good tactics, as a strategy, can also be applied when acquiring inner wisdom. Unlike the other gods, Athena was a virgin who did not like or participate in sexual intercourse. As an esoteric figure, it is possible she represents the need to bring the masculine logical side together with female creative wisdom, but not through sexual union. On an esoteric level Athena can therefore be seen as heralding a new path of finding union, one that is thinking based rather than emotionally based. This is consistent with divisions between meditation method, which are either thinking or feeling based (Arka in [31]). Athena was twice born, the first time she was born of Metis in Zeus, and the second time she was born or came into being 'fully-grown' through Zeus' head. For this path virginity referring to sexual chasteness seems to be a requirement.

- The path of Athena seems to lack the emotional aspect, which is prevalent in some esoteric traditions. On the other hand, the emotional aspect can be seen in the *Pythia's* relationship with the masculine Apollo, who then spoke through her. This relationship can be seen as somewhat similar to the *Bhakti* tradition of India. The *Bhakti* tradition is mentioned in Indian texts such the Shvetashvatara Upanishad, the Katha Upanishad and the Bhagavad Gita, which are dated from the 1st millennium BC [40]. It involves devotion to, and love for, a personal god or a representational god by a devotee and it is one of the paths that is said to lead to liberation or moksha [41].
- As an adjective *parthénos* "means pure, unadulterated" [34]. In its more modern meaning when referring to vegetable oil, "virgin oil is obtained from the first pressing" [42]. Based on Arka's [27] suggestion that during the process of self-inquiry we are rewinding our surface consciousness in an endeavor to personally "reverse the evolution of all that has happened to us" (p.38), the practitioner who completes the journey can be considered as a person who is pure and unadulterated. From this perspective the *Pythia* can be considered as a woman through whom the message of the god came directly or freshly, from the "first pressing" and not altered by human activity or ego. So in this sense she was *parthenos*, a virgin and a vehicle for the word of god regardless if she was sexually chaste or not.

FINAL INSIGHTS AND REFLECTIONS

The story of Delphi reveals itself slowly. The word 'virgin', as we have seen, has many meanings. Also it also seems as though more than the oracle was pronounced in Delphi. On a subtle level it seems as though the site also represents the cosmology of the time and of time itself as well as the nature of reality. The name Delphi, which comes from the same root as womb, can be seen as representing the mystical female, where new life, like the oracle, is unceasingly generated.

It is probable that as humans began to understand more about the human reproductive process including the role of the male in generating children, a new way forward was invented to take over from the old parthenogenetic matriarchal myth. At first I found it strange that on the one hand Apollo killed the Python, and yet it was still a virgin who pronounced the oracle. However this seems to reflect a shift in the importance of women from being the vessel of the goddess within her to being a vessel or virgin through whom a god could speak. This was accompanied by a shift from a matriarchal to patriarchal society where the male wanted to know whether the children were his or not. This involved a whole new political and economic system, which centered round the chasteness and sexual virginity of women. However in the esoteric sense, as a lover of her deeper Self or essence, the woman did not have to be a virgin,

but through the process of Self discovery which includes humbling the ego, she regained her 'virginity' or purity. This in turn enabled her to speak in the name of God or Higher Nature [43]. Of course I cannot prove that the thread underlying the meaning of virgin included an esoteric tradition where women were searching for their true self, I can only suggest that it might have been so. In this sense, the term virgin could also apply to a man who has undertaken the inner path of self-inquiry.

Oracles and myths try to make sense of our knowledge about reality. They tell stories that probably made sense to the people of the time, but they also often seem to introduce new ways of understanding reality. Delphi seems to have played a leading role in this endeavor. Delphi, 'the womb', was the center of the world where another way of knowing was acclaimed and recognized throughout the Hellenic empire. Whether the *Pythia* practiced an esoteric pathway or not, her gift as the pronouncer of the oracle or what we can call clarity of vision or intuition was held in tremendous esteem not only by the public but also by the philosophers of the time. Certainly all paid homage to her. It is also important to realize that Delphi also represents both outer cosmic forces and inner psychic forces. As a psychic force, in paying homage to the *Pythia* in the world outside, the inner intuitive capacities were also recognized and held in the highest esteem. Talking of the "virgin", Woodman and Dickenson [44] describe her as being

like the virgin forest, she is full of her own life force, full of potential, and pregnant...she guides and advises and acts with absolute clarity, often with a startling sense of humor that delights in play. She is blunt, neither compassionate nor sentimental. She demands embodiment. Living in the creative intercourse between chaos and order, she calls us into the dance of creation, her love in her living body. She speaks to men as clearly as to women. (p. 2)

In spite of women not having any power in public discourse in classical times in Greece, it seems as though both male and female ways of knowing lived side by side where each gave 'life as creativity' to the other. In this sense the inherent sexuality of the Universe was recognized. 'Intercourse' as understood via its etymological meaning as 'communion to and fro' or a 'running between' of energy between two entities, not only took place, but also was acknowledged, although maybe not quite in these terms.

As we have seen, "the body of the *Pythia* was open to the word of god" [12, p. 31]. In pronouncing the oracle in the name of "god", she was bowing to the transcendent nature of the universe or Self and hence the maxim of Delphi, "Know your Self" was also being honored.

Curiously, groups of Visigoths sacked Rome in 410 AD, not 20 years after the Christian emperor Theodosius silenced the oracle in 392 AD. In 455 AD, Rome was sacked again, but by the Vandals. With the fall of Rome, the Goths and Visigoths of the north over ran Southern Europe leading to a period known as the "dark ages" (also known as the Early Middle Age) for it was characterized by intellectual darkness and economic regression [45]. And thus ended an era, which at its height had extended way beyond its original base in the Mediterranean.

With the silencing of the oracle, the female way of knowing was also silenced. Europe's turbulent history during the Inquisition is a sad testimony to how *women's way of knowing* was also silenced. The 30-year war, which took place between 1618-1648, was largely fought on German soil. It is considered one of the most destructive wars in European history and one of the longest wars in modern history. Although initially the war was religious involving Catholic and Protestant states, it also coincided with the rise to a new economic system. The war roughly coincided with the peak of the burning of women or "witch hunts" which started during the late medieval period and peaked between 1580 and 1630 [46]. Women seemed to

have been 'caught' in the cross fire, for although many of them were humble peasants, they possessed natural knowledge of healing, herbs and midwifery that had been passed down from generation to generation.

Today, in spite of much scientific research demonstrating the existence of intuitive and psychic abilities, this way of knowing is still not fully recognized with much work in this field being known as 'pseudo science'. In commenting on her work done in parapsychology (scientific investigation of potential skills that are commonly known as psychic abilities, such as precognition, telepathy, and so on), Utts [47] maintains that she has observed very careful work done in this field which also includes classified work undertaken by the United States government during the cold war to see the use of these abilities for intelligence gathering. At the end of the project she wrote a report to congress reflecting what she felt and still feels is true. I include it below:

The data in support of precognition and possibly other related phenomena are quite strong statistically, and would be widely accepted if they pertained to something more mundane. Yet, most scientists reject the possible reality of these abilities without ever looking at data! And on the other extreme, there are true believers who base their belief solely on anecdotes and personal experience. I have asked the debunkers if there is any amount of data that could convince them, and they generally have responded by saying, "probably not." I ask them what original research they have read, and they mostly admit that they haven't read any! Now there is a definition of pseudo-science— basing conclusions on belief, rather than data! [47, Data Beat Anecdotes, para. 4]

The Universe can be seen as the eternal and infinite womb that contains all the forms of life that have been, that are and that will be, the womb from which new life is unceasingly and eternally generated. To understand this Universe, science, as it exists today, will not get us there. Science up to now 'has ridden' on one limb, a masculine rational way of seeing the Universe. It has given rise to many new technologies, which at the same time, has created a way of living on this planet that is not sustainable.

When the divine feminine, the goddess, is no longer revered, social and psychic structures become over mechanized, over politicized, over militarized. Thinking, judgment and rationality become the ruling factors. The need for relatedness, feeling, caring or attending to nature goes unheeded - there is no balance, no harmony, neither within oneself nor in the external world. With disregard to the archetypal image so related to passionate love, a splitting off of values, a one sidedness occurs in the psyche. As a result, we are sadly crippled in our search for wholeness and health. [48, p.16]

What we need today is a new way forward, which includes the female principle, a mystical path, which includes both ways of knowing and where Mother Nature is respected; a way that also includes the individual search for his or her true Self or soul, no matter what name we give for IT or how we choose to conceive of IT. Maybe the mystical scientist will be part of this new development.

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Effect of CTOP on Behavioural Intentions in the Banking Sector: The Mediation Role of Trust

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ABSTRACT

The issue of service quality measurement is extensively researched, but the continuous changing banking regulatory environment necessitates a correspondingly continuous evaluation of service quality factors. This study uses CTOP (customer care, tangible value, operational value and product value) to measure service quality in the banking sector, and investigated its effect on customer behavioural intentions with trust as a mediator. The study was conducted on 825 useable responses which represented 82.5% of questionnaires distributed. Explanatory research design was used and Stata version 13 and IBM Statistical Package for Social Sciences version 20 were the software used in data analysis. The study used Structural Equation Model (SEM) for data analysis and explored direct, indirect and total effect relationships. Confirmatory Factor Analysis (CFA) was used for data purification. The research found that CTOP has positive and statistical significant relationships with customer trust and customer behavioural intentions. Customer trust also has positive and statistical significant relationship with customer behavioural intentions. On the mediation effect, customer trust partially mediates between CTOP and customer behavioural intentions. Customer trust fully mediates between product and tangible values on one hand and customer behavioural intentions on the other. Product value affects customer intentionality and in turn intentionality also affect customer advocacy. This means that researchers and managers of banks should consider CTOP effects on customer behavioural intentions with or without customer trust. However, researchers and service firm managers should note that for product and tangible values to affect customer behavioural intentions, trust must be considered.

Keywords: customer trust, customer behavioural intentions, customer care, tangible value, operational value, product value

INTRODUCTION

Existing literature on service quality is decisive on the importance of service excellence and superiority and the need for banks to improvise innovative means of monitoring their performance in meeting customer service preferences [1, 2, 3, and 4] and other behavioural intentions like continue to do business with banks. Although the issue of service quality measurement is extensively researched, the continuously changing banking regulatory environment necessitates a correspondingly continuous evaluation of quality factors. To enhance user-friendly service quality measurement in an evolving financial sector, this

research has used CTOP (customer care, tangibility value, operational value and product value) to measure service quality.

In service sector, customer longevity can only be achieved mainly through delivering high quality services [5, 6, 7, and 8] especially under regulated and volatile business environment. Banks need to understand customer service requirements and comprehend the impact of service delivery performance on customer behaviours intentions [9]. Continuous studies in service quality guarantees fast service flaw detection, which in turn, allows for fixing quality leakages that can affect customer behavioural intentions before real damage is done on institutional image [1 and 2].

Indeed, most findings from service quality and behavioural intention studies have provided general recommendations and this may not give adequate course of action to industry practitioners in understanding the difficulties of service quality concept to execute strategic marketing plans to accomplish service quality goals [10, 11, and 12].

This study has utilized CTOP (customer care, tangible value, operational value, and product value) to evaluate the mediating effect of customer trust in the relationship between service quality and behavioural intentions thereby informing theories of service quality and service industry practitioners on how to use service quality and trust to influence customer behavioural intentions. This research has built on the explicit connections between service quality dimensions and customer behavioural intentions by probing the link between the individual dimensions of service quality and customer behavioural intention dimensions. This approach has explored the consequent societal implications for customers and public policy makers in the financial sector. Linking the service quality and customer behavioural constructs at the dimensional level also increases the diagnostics of explaining customer behavioural intentions.

LITERATURE REVIEW

Lewis and Booms [79] have argued that service quality is a measure of how well service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis. The literature conceptualizes service quality as the result of the comparison between delivered and expected service performance [5]. Customers perceive the relative inferiority or superiority of services by comparing a firm's actual performance with their expectations, shaped by experience and memories [13, 14, 15, and 16]. The outcome of perceived service quality is not equivalent to customer satisfaction which measures the overall excellence or superiority of a service [6].

Under the framework of the disconfirmation paradigm [17], Nordic [13 and 14], and the American [5 and 6] models, perceived service quality dominates the literature. The former distinguishes between "technical" and "functional" quality, reflecting the service outcome and process respectively. Customers' perceptions on these dimensions are filtered through corporate image. The American model, also known as the "gaps analysis model" defines service quality across five dimensions namely tangibility, responsiveness, assurance, empathy and reliability [5]. The disconfirmation paradigm is not without its critics. Cronin and Taylor [18] proposed that service quality is better operationalised in terms of "performance-only" rather than "performance-minus-expectations" and introduced SERVPERF, which in fact is the performance part of the SERVQUAL scale. Cronin and Taylor [18] have proved with statistics that SERVPERF performs better than SERVQUAL. Koushiki [19] and many other researchers have replicated and modified service quality elements to measure its effect on customer attitudes and behaviours. Existing studies have shown that organizations that are making

progress in their respective markets implement service quality in their daily marketing activities to significantly and positively impact customers' cognitive and attitude reactions [20]. In a customer behaviour perspective, customer satisfaction and trust are often viewed as a function of single and multiple transaction-specific satisfactions [21].

Customer trust is a psychological state interpreted in terms of perceived probabilities [22], confidence [23, 24, and 25] or expectancy [26] assigned to the occurrence of some positive outcomes on the part of the trusting party. Accordingly, to trust someone implicitly means that there is a probability that the trusting party will perform actions that will result in positive or at least non-negative outcomes for valued exchange. From previous theoretical treatments of trust, it is seen that this generalized expectancy or occurrence probability is based on the dispositional attributions made to the partner about behavioural intentions and qualities.

In a customer behavioural perspective, behavioural intentions are broadly viewed based on several approaches such as customers' will to remain with, or defect from other firms' services [27, 28, 29, and 30]. In most cases, customer behavioural intentions construct consists of two major types namely, favourable and unfavourable behavioral intentions. Favourable behavioural intentions concept is often related to customer's preference to use services delivered by service provider and this is manifested in terms of customers' readiness to recommend, purchase, deliver positive word-of-mouth, and to remain as loyal customer [30]. In contrast, the concept of unfavourable behavioural intentions is normally associated with negative customer responses, such as switching and complaint behaviour [31]. This indicates that behaviour intention is an important outcome of the relationship between service quality and customer trust. This study has categorised customers behavioural intentions into action where customer undertakes specific exchange transactions, and advocacy where customer communicate good about firm's value to improve corporate image.

In many service quality models, researchers have concluded that service quality, customer trust and behavioural intentions are highly interconnected constructs. The competency of service provider to appropriately implement service quality in executing service jobs is invoked by customer positive behavioural intention [32]. Though the nature of this relationship is important, the role of customer trust as a mediating variable has been given little emphasis in the context of business research [11].

Service Quality and Behavioural Intentions

Service quality has been assumed to be a key factor in explaining customer purchase intentions, but the relationship has not been fully explained [33]. Many research works have established a link between service quality and behavioural intentions, but only through value and satisfaction [34]. Other researchers have found a direct link between perceived service quality and behavioural intentions [6 and 27].

The relationship between service quality and customer behavioural intentions has been substantially examined by Cronin and Taylor [18] and Boulding et al [35]. Cronin and Taylor (18) works concentrated on repurchase intentions and they found that there is no significant relationship between the two constructs. Boulding et al. [35] focused on both repurchase intentions and willingness to recommend and they found significant and positive relationship among the constructs. Kumar et al. [36] research in the banking sector has shown that high service quality helps in gaining a competitive edge in terms of higher revenue, customer loyalty and customer retention. Kumari et al. [36] research works have also revealed that high levels of service quality promotes customers satisfaction, customer loyalty, new customer attraction, increased market share and profitability for the banking sector.

Few studies have explored the relation between service quality and customer behavioural intentions in the banking sector. Sing and Arora [37] study shows that the customers of nationalized banks were not satisfied with the employee behaviour and infrastructure, while respondents of private and foreign banks are not satisfied with high charges, accessibility and communication. Coudhury [38] studied private and public sector banks, explored the relation between service quality and customer behavioural intentions but with a small sample size of customers and banks. The results by Coudhury [38] provides a strong support for the predictive power of perceived service quality on customer purchase intentions and shows that reliability is most important for influencing customer purchase intentions. This is followed by employee behaviour, tangibles and convenience.

Kondasani and Panda [39] did a study on how patients' service quality perception can lead to behavioural intentions. These researchers found that service seeker and service provider relationship, quality facilities, and the interaction with supporting staff have positive effect on customer perception. Ismail et al. [40] analysis confirmed that relationship between service qualities features (tangible, reliability, responsiveness, assurance and empathy) with customer satisfaction were positively and significantly correlated with behavioural intentions. This result demonstrates that the effect of tangible, reliability, responsiveness, assurance and empathy on behavioral intentions was mediated by customer satisfaction. Ratna Rooshka [41] examined empirical data from 186 respondents in Yogyakarta, Indonesia and the results revealed that there is indirect relationship between service quality and loyalty through trust. This study therefore hypothesis that:

H₁ : Service quality has positive and significant effect on behavioural intentions.

Service Quality and Trust

The trust literature suggests that beliefs in trust results in reliability, high integrity, and qualities of service that is consistent, competent, honest, fair, responsible, helpful and good [42]. Trusts arise from a long process until parties involved trust each other. If trust is established between a customer and a firm, the mutual benefit is overwhelming. In the process of forming trust, Doney and Canon (1997) as cited by Johnson and Grayson (43) offered the factors that influence it which is not limited to corporate reputation. Unidha and Sentani [44] studied the effect of service quality on customer trust and loyalty among Giant Shopping Cards holders in Malang. The results of their research shows that service quality directly affects customers trust, service quality directly affects customer loyalty, and customer trust is able to mediate the influence of service quality on customer loyalty.

Seigyoung [45] found evidence that perceived performance excellence has effect on trust. Yuswanto [46] study also revealed that the quality of services as measured by tangibles, reliability, responsiveness, assurance and empathy has potential to increase public confidence in transactions through e-commerce in Indonesia. Contrary to these findings, Chiou and Droge [47] have found that service quality facilities do not affect satisfaction and trust, but interactive service quality affects satisfaction and trust. Based on the result of empirical study, this research hypothesis as follows:

H₂: Service quality has positive and significant affect on customer trust.

Trust and Behavioural Intentions

Trust has received a great deal of attention from researchers in several disciplines such as psychology [24, 26 and 48], sociology [49], and economics [50], as well as in more applied areas like management [23] and marketing [51, 52 and 42]. Although this multidisciplinary interest has increase the wealth to the construct, such a diversity of academic learning makes it difficult to integrate the various perspectives on trust to find a consensus on its nature [53and

54] has indicated that not only do different researchers address trust concept from different approaches and methods, they have also offered predictable differences of opinion over its nature. Contrary to personality, psychologists analyse trust as an individual characteristic [48], social psychologists think about trust as an expectation that is specific to a transaction and the person with whom one is transacting. Economists and sociologists view trust as how institutions and incentives reduce uncertainty, and in turn increase value associated with transactions. In more applied areas like management and marketing, numerous authors suggest that trust is an element of relationships in business environment [52, 25, 55 and 42].

Deutsch [24] defines trust as the confidence that one will find what is desired from another, rather than what is feared. Mayer, Davis, and Schoorman [56] affirm that trust is the willingness of a party to be vulnerable to the actions of another party. Barney and Hansen [23] suggested that trust is the mutual confidence that one party has not exploited the other's vulnerability in an exchange process. Therefore, to make the attribution that another person is trustworthy, there should be the possibility to show that an entity is trustworthy [26]. In other words, trust is based on the notion that one party attempts to understand the other in terms of acts, dispositions, and motives that would predict positive responses [26]. The trust literature in psychology discipline mostly focus on the motivational dimension of the concept. This dimension is related to the attribution that the exchange partners' behaviour (verbal or nonverbal) is guided or motivated by favourable and positive intentions towards the welfare and interests of all the parties involve [51].

Given the complexities in the definition of trust, this study concludes trust to be customers' sense of security held in the dealings with a firm based on the perceptions that the firm is reliable and responsible for the interests and welfare of the customer. This means that trust is an important variable affecting human relationships at all levels [48]. Therefore, trust should be analysed as an important facet of customer behavioural intentions. Customer trust requires willingness to take personal risk base on the over reliance of firm's promised value, general expectancy of positive outcomes (fiability), and the disposition attribute to firm's value as reliable and dependable (intentionality). Therefore, when a customer trust a firm, the customer would not have the intention to lie, break promises, or take advantage of a firm's defenselessness. This study hypothesized that:

H₃: Trust has positive and significant effect on behavioural intentions.

Mediating effect of Trust on Service Quality and Behavioural Intentions

The studies conducted in different service sectors such as retail, banking, online environment and luxury brand related context [57, 58, 59, and 60] indicate that trust has a significant and positive relationship with behavioural intentions. From practical point of view, it is obvious that increasing trust results in positive customer behavioural intentions. Mayer et al. [61] has pointed that an increased trust leads to positive customer perception in acceptance of electronic banking but the complexities of other construct relationships such as service quality and behavioural intention may not make it automatic. Tonder et al. [62] discovered that customers who trust luxury motor vehicle dealership may be more committed which can strengthen the relationship between customer satisfaction and favourable behavioural intention towards the dealership. Osman and Ilham [63] study on Malaysia rural tourism revealed that trust partially mediates the relationship between customer satisfaction and customer loyalty. These authors' study also showed that customer satisfaction enhances trust in Malaysia rural tourism. With this background, the researchers are convinced that it is important to investigate trust mediation dynamics in service quality-behavioural intention relationship. Therefore this research hypothesized that:

H₄: Trust fully mediates service quality-behavioural intentions relationship.

RESEARCH METHODOLOGY

Demographic information

This study involved a sample of 825 respondents. A descriptive summary of the respondents shows that most of them are male (446) representing 54.06% and 379 representing 45.94% are females. Even though the females are more than males in Ghana, more males are in employment with consequential effect to have behavioural intentions on banks services. The general observation is that, most people regardless of profession and nature of employment do business with banks. This is a healthy development as financial inclusion is important for national economy.

Looking at the nature of profession distribution of the respondents, it is observed that the majority of the respondents, 258 (representing 31.27%) have wide range of varied profession that the study cannot categorise. However, this varied professional background offer this study the opportunity to include a number of useful respondents. In terms of numbers, more teachers (115 representing 13.94%) participated in the study and this is followed by administrators (105 representing 12.72%) and bankers (103 representing 12.48%). The table 1 below shows the descriptive information on the profession of the respondents.

Table 1: Profession of Respondents

S/N	Profession	Male	Female	Total
1	Accountant	51	17	68
2	Banker	44	59	103
3	Marketer	26	12	38
4	Administrator	51	54	105
5	Teacher	73	42	115
6	Entrepreneur	42	31	73
7	Health Worker	28	37	65
8	Others	131	127	258
	Total	446	379	825

As regards the nature of employment, public sector employees constitute the highest number of the respondents with 301 participants representing 36.48%. This is followed by private sector employees and self employed in the order of second and third. Table 2 shows the statistical information on the respondents' nature of employment.

Table 2: Nature of Employment of Respondents

S/N	Sector	Male	Female	Total
1	Public sector employee	161	140	301
2	Private sector employee	161	112	273
3	Self Employed	124	127	251
	Total	446	379	825

Data collection and sample size adequacy assessment

For the study reported herein, data were collected through questionnaire from 1000 Local bank customers who reported their perceived service quality, trust and behavioural intentions to do business with Local banks. Elimination of incomplete data resulted in 825 useable surveys. This valid response rate of 82.5% is appropriate for a study of this nature [64]. The data was collected using personal contact at the official premises of respondents and this is in line with the recommendations by Sureshchandar et al [65 and 66] that personal contact provides detail engagement to survey.

Before performing the statistical analyzes, the n=825 sample was examined for size adequacy and found sufficient. Regarding reliability analysis, Yurdugul [46] has proved that the minimum sample size required for coefficient alpha depends on the largest eigenvalue of Principal Components Analysis (PCA). For a value exceeding 8.00, the sample alpha coefficient is a robust estimator of the population alpha even with samples as low as n=30. As regards factorial analysis, Fabrigar et al [67] have proved that the minimum sample size should depend on the extent to which factors are over-determined and the level of communalities. A sample in the area of n=100 would produce accurate results if all factors are over-determined and communalities exceed 0.70 on average (67). In this study all the constructs and their dimensions are over-determined (variables range between 4 and 6) and communalities are around 0.70 on average. These, in combination with the KMO statistic (service quality-0.967; customer trust-0.951; behavioural intention-0.907) and the Bartlett's test of sphericities (significant at $p < 0.001$), clearly indicate that the n=825 sample is sufficient for both reliability and factorial analysis. The table 3 below shows statistical information on the constructs in this study.

Table 3: Construct Statistical Information

Construct	Number of Dimensions	Total Variance Explained	KMO	Chi-square	Degree of Freedom	P-Value
Service Quality	4	66.11%	0.967	10,444.57	210	0.000
Customer Trust	2	70.76%	0.951	6,500.64	55	0.000
Customer Behavioural Intentions	2	81.55%	0.907	3,709.86	15	0.000

SCALE PURIFICATION AND DATA ANALYSIS

Scale purification

The drafted questionnaire was put to test with 50 customers of Local banks. They were requested to give their opinion on the state of the questions in the area of clarity, omissions and errors. The feedbacks received were on clarification of some statements and repetitive nature of some statements. Corrections were made on those statements as the researchers agreed with them. The revised questions were sent to two faculty members whose specialties are in marketing and statistics, and one professional banker and the feedback was positive.

The CFA was used to purify the measurement scales, evaluate their internal consistency, and assess their discriminant validity. The objective was to derive a relatively rich and manageable number of factors that capture as much information as possible in the observed variables [68]. The service quality has 4 dimensions namely customer care value, product value, tangible value and operational value. The customer care value measures the extent to which staff care in dealing with customers. The product value looks at how different level of service on offer meets customer needs. The tangible value considers the physical aspects of services and how they relate to customers' expected value, and the operational value evaluates service delivery processes in line with customers' expectations. The customer trust has 2 dimensions and was adapted from Delgado et al. [69] trust measurement scale. The trust dimensions they used are fiability and intentionality. The fiability dimension is on customer motivation to trust that a firm has interest in customer welfare. The intentionality dimension also focuses on the trust that a firm has the required expertise to perform core activities, carry out obligations and accomplished promises made to customers. The behavioural intention has 2 dimensions. The dimensions are action and advocacy. The action dimension of behavioural

intention considers the positive action to act in an exchange transaction and that of advocacy dimension is about communicating the good works of a firm to increase corporate image.

The alpha coefficients of higher than 0.7 [70, 71 and 72], and coefficient of determination values which are greater than 0.8 indicated that the measurement scales are appropriate for the research. Therefore, it can be concluded that the items measured the variables of observation correctly. The Cronbach alpha coefficient showing the internal consistencies of the variables also proved acceptable.

The dimensions in the constructs were presented as statements with rating scales ranging from 1 (very strongly disagree) to 7 (very strongly agree). Cronbach's [73] alpha reliability analysis was employed for initial scale purification. On the basis of the "alpha increase if item deleted" criterion [74], 2 items were deleted from the service quality construct. The table 4 below shows dimensions, number of items retained and their Cronbach's Alpha values.

Table 4: Dimensions and Cronbach's Alpha

S/N	Dimension	Number of Items Retained	Cronbach's Alpha
Service Quality			
1	Customer Care Value	5	0.887
2	Product Value	4	0.847
3	Tangible Value	6	0.879
4	Operational Value	4	0.847
Customer Trust			
5	Fiability	6	0.900
6	Intentionality	5	0.908
Customer Behavioural Intentions			
7	Action	3	0.842
8	Advocacy	3	0.876

Regression Analysis of Service Quality, Customer Trust and Customer Behavioural Intentions

The study analysed the relationships among service quality, customer trust and customer behavioural intentions. It is noted that service quality accounts for 45.73% of variance in customer behavioural intentions. In addition a unit change in service quality will cause customer behavioural intentions to positively change by 58.23%. As regards the relationship between service quality and customer trust, service quality contributes 56.49% to customer trust variance. A unit change in service quality causes customer trust to favourably change by 71.30%. Customer trust contributes 58.53% to the variances in customer behavioural intentions, and a unit change in customer trust causes customer behavioural intentions to change by 69.46%. Table 5 below shows the regression information on the individual relationships among the constructs.

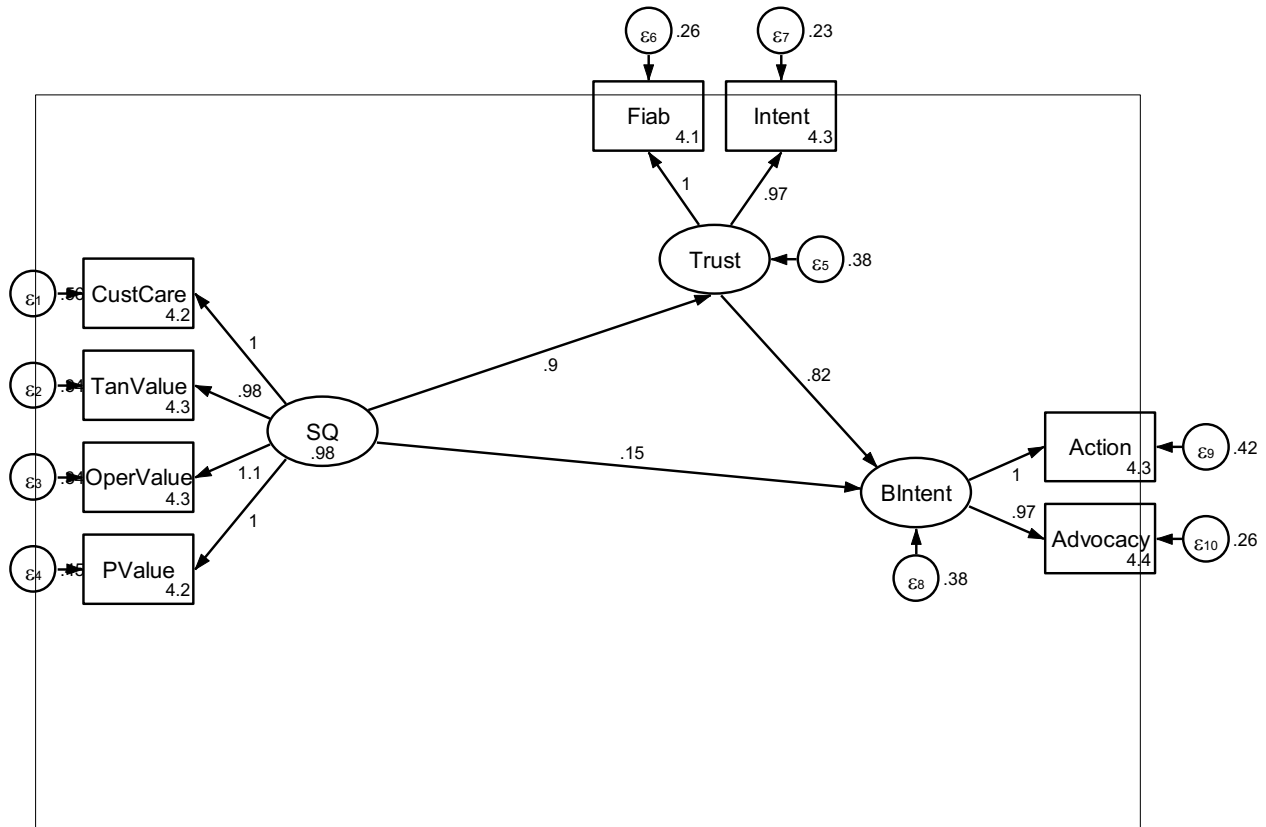
Table 5: Relationship among Service Quality, Customer Trust and Customer Behavioural Intentions

Path	Coefficient	OIM	T-Value	P-Value	R-Square	RMSE
SQ → CBI	0.5823488	0.0220834	26.37	0.000	0.4573	0.78371
SQ → CT	0.7130104	0.0217882	32.72	0.000	0.5649	0.70173
CT → CBI	0.6945969	0.0203594	34.12	0.000	0.5853	0.72252

SQ=Service Quality CBI=Customer Behavioural Intentions CT=Customer Trust

The study used Structural Equation Model to show the relationship among the constructs. The figure 1 below shows the output from the SEM output.

Figure 1: SEM Output for the Service Quality Relationship with Customer Trust and Customer Behavioural Intentions



SQ=Service Quality Trust=Customer Trust BIntent=Customer Behavioural Intentions

The output shows that service quality has positive relationship with customer trust and customer behavioural intentions. Customer trust also has positive relationship with customer behavioural intentions. The goodness of fit test shows that the model is good for use. The model has the following Goodness of Fit statistics: pclose =0.008; chi square=88.541; p-value=0.000; RMSEA=0.071; CFI=0.987; TLI=0.978; SRMR=0.021; and CD=0.926.

Effect of Service Quality Dimensions on Customer Trust and Customer Behavioural intention

The study analysed the effect of service quality dimensions on customer trust and customer behavioural intentions. On customer trust, the service quality dimension that has the highest

effect is product value with coefficient value of 0.298054. Customer care and tangible values follow in the order of second and third.

As regards customer behavioural intentions, service quality dimension with the highest effect is customer care with coefficient value of 0.1721893 and is followed by operational value with 0.0842654 with significant values. Product and tangible values cause minimal changes to customer behavioural intentions and are not significant. The table 6 below shows the statistical information on the relationship among constructs and dimensions.

Table 6: Relationship between Service Quality Dimensions, and Customer Trust and Customer Behaviour Intentions

Path	Coefficient	OIM	Z-Value	P-Value
CC → CT	0.2157979	0.0310046	6.96	0.000
PV → CT	0.2980540	0.0335953	8.87	0.000
TV → CT	0.1541950	0.0392844	3.93	0.000
OV → CT	0.1235361	0.0384195	3.22	0.000
CC → CBI	0.1721893	0.0333209	5.17	0.000
PV → CBI	0.0088510	0.0367253	0.24	0.810
TV → CBI	0.0015205	0.0414130	0.04	0.971
OV → CBI	0.0842654	0.0403790	2.09	0.031

CC=customer care CT=customer trust PV=product value TV=tangible value
OP=operational value CBI=customer behavioural intentions

Effect of Service Quality on Behavioural Intention and the Mediating Role of Trust

Mediation seeks to identify and explicate the mechanism that underlies an observed relationship between an independent variable (service quality) and a dependent variable (behavioural intentions) via the inclusion of a third explanatory variable, known as the mediator (trust). Rather than hypothesizing a direct causal relationship between service quality and behavioural intention, a mediation model hypothesizes that service quality causes the mediator variable, (trust) which in turn causes the dependent variable (behavioural intention). Having certified the measurement instrument's suitability for statistical analysis, the structural equation modeling was used to explore the relationship between the variables. MacKinnon et al [75] believed that, there are many ways that can be used to test hypotheses with respect to establishing mediation. One of the commonly method that is adopted has to do with causal steps strategy, propounded by Baron and Kenny (76). Thus, the investigator estimates the paths of the model, using Ordinary Least Square (OLS) regression or SEM, that ascertain the degree to which many criteria are met. Baron and Kenny (76) propose some important but not sufficient conditions which must be met in order to claim mediation is happening. For mediation conditions: X (Independent variable) is significantly related to M (Mediator); M is significantly related to Y (Dependent variable). The relationship of X to Y diminishes when M is in the model. That means that, each of the constructs should show proof of a nonzero monotonic association with each other, and the relationship of X to Y must decrease substantially upon adding M as a predictor of Y [77].

The study expects trust in the banking sector to mediate between service quality and customer behavioural intentions. Examining the standard estimates of the mediation model, it is observed that the direct paths from service quality to behavioural intentions is positive and significant ($\beta=0.15$; $p<0.016$). The indirect path of service quality through customer trust to customer behavioural intentions is also positive and statistically significant ($\beta=0.74$; $p<0.000$). The total effect for service quality through customer trust to customer behavioural intentions is 0.89 and significant ($p<0.000$). Base on the assumption by Baron and Kenny [76] customer

trust plays partial mediation role between service quality and customer behavioural intentions. The implication is that, service quality on its own can positively and significantly impact on customer behavioural intentions in the banking sector. There is also another way customer behavioural intentions can be achieved thus through trust that customers have in the banking services. The table 7 below shows the direct, indirect and total effect of service quality on behavioural intentions through trust.

Table 7: Direct, Indirect and Total Effect for Service Quality on Behavioural Intentions through Trust

Path	Direct effect (D)	Indirect Effect (I)	Total Effect (TE) (D+I)	Form of mediation
SQ → C T → CBI	0.1515518**	0.741248**	0.8927998**	Partial mediation

** Significant at 95% confidence level SQ=Service Quality CT=Customer Trust CBI=Customer Behavioural Intentions

Effect of Service Quality Dimensions on Behavioural Intention and the Mediating Role of Trust

The analysis of the effect of service quality dimensions on behavioural intentions offers the opportunity to know how specific service quality dimensions affect customer behavioural intentions when customer trust mediates.

Mediating role of Trust between Customer Care and Behavioural Intention

The study expects trust in the banking sector to mediate between customer care and behavioural intentions. Examining the standard estimates of the mediation model, it is observed that the direct paths from customer care to behavioural intention is positive and significant ($\beta=0.172$; $p<.000$). The indirect path of customer care through trust to behavioural intention is also positive and statistically significant ($\beta=0.141$; $p<.000$). The total effect for customer care is 0.313 and significant ($p<.000$). Base on the assumption by Baron and Kenny [76] there is partial mediation. The implication is that, customer care on its own can positively and significantly impact on behavioural intentions in the banking sector. There is also another way behavioural intentions can be achieved by customer care influencing customer trust in the banking sector.

Mediating role of Trust between product value and Behavioural Intention

The study expects trust in the banking system to mediate between product value and behavioural intention. Examining the standard estimates of the mediation model, it is observed that the direct paths from product value to behavioural intention is positive but not significant ($\beta=0.009$; $p>0.810$). The indirect path of product value through trust to behavioural intentions is also positive and statistically significant ($\beta=0.194$; $p<.000$). The total effect for product value is 0.203 and significant ($p<.000$). Base on the assumption by Baron and Kenny [76] there is full mediation. The implication is that, product value on its own will not significantly impact on behavioural intention in the banking sector. One of the ways product value can impact on customers behavioural intentions in the banking sector is through trust.

Mediating role of Trust between tangible values and Behavioural Intentions

The study expects trust in the banking system to mediate between tangible values and behavioural intentions. Examining the standard estimates of the mediation model, it is observed that the direct paths from tangible values to behavioural intentions is positive and but not significant ($\beta=0.002$; $p>0.971$). The indirect path of tangible values through trust to behavioural intentions is also positive and statistically significant ($\beta=0.100$; $p<.000$). The total effect for tangible values is 0.102 and significant ($p<.035$). Base on the assumption by Baron

and Kenny (76) there is full mediation. The implication is that, tangible values on its own will not significantly impact on behavioural intentions in the banking sector. One of the surest ways tangible values can impact on customers behavioural intentions in the banking sector can be through trust.

Mediating role of Operational Value between customer care and Behavioural Intention

The study expects trust to mediate between operational values and behavioural intentions. Examining the standard estimates of the mediation model, it is observed that the direct paths from operational values to behavioural intention is positive and statistically significant ($\beta=0.084; P=0.037$). The indirect path of operational value through trust to behavioural intention is also positive and statistically significant ($\beta=0.080; P=0.002$). The total effect for social media usage is also positive and statistically significant ($\beta=0.165; P=0.000$). Base on the assumption by Baron and Kenny (76) trust partially mediates the relationship between operational values and behavioural intentions. The implication is that, the adoption of operational values on its own will impact positively and significantly on behavioural intentions in the banking sector. There is also another way that operational values can impact on behavioural intentions in the banking sector through trust.

The table 8 below shows the statistical information on the mediating role of trust between service quality dimensions relationship and behavioural intentions in the banking sector.

Table 8: Direct, Indirect and Total Effect for Service Quality Dimensions on Behavioural Intentions through Trust

Path	Direct effect (D)	Indirect Effect (I)	Total Effect (TE) (D+I)	Form of mediation
CC \longrightarrow C T \longrightarrow CBI	0.1721893**	0.1405218**	0.3127112**	Partial mediation
PV \longrightarrow CT \longrightarrow CBI	0.008851	0.1940849**	0.2029358**	Full mediation
TV \longrightarrow CT \longrightarrow CBI	0.0015205	0.1004077**	0.1019282**	Full mediation
OV \longrightarrow CT \longrightarrow CBI	0.0842654**	0.0804434**	0.1647089**	Partial mediation

** Significant at 95% confidence level

CC=customer care PV=product value TV=tangible value OV=operational value
CT= customer trust CBI= customer behavioural intentions

The information in table 8 above has revealed that trust fully mediates the relationship between product and tangible values, and customer behavioural intentions. This means that for product and tangible values of bank to influence behavioural intentions, customer must have trust in banking services. As regards the effect of customer care and operational value on behavioural intentions, trust mediation can or cannot be present. This means that customer care and operational value influence behavioural intentions with or without the influence of trust.

The study has revealed that product value relationship with the two dimensions of trust is positive (fiability: $\beta=0.35$; intentionality: $\beta=0.41$) and significant ($p=0.000$ for both). Intentionality relationship with advocacy is positive ($\beta=0.45$) and significant ($p=0.000$). This means that trust mediation between product value and customer advocacy behavioural intentions is strong. The relationships among product value, tangible value, fiability, intentionality, action and advocacy is shown in table 9 below.

Table 9: Effect of Customer Care and Operational Value on Behavioural Intentions Dimensions

Path	Coefficient	OIM	T-Value	P-Value
Product value → Fiability	0.3494745	0.04544118	7.70	0.000
Product value → Intentionality	0.4098055	0.0471371	8.69	0.000
Tangible value → Fiability	0.3155152	0.044109	7.15	0.000
Tangible value → intentionality	0.3437644	0.0457848	7.15	0.000
Fiability → Action	0.3039585	0.0354687	8.57	0.000
Fiability → Advocacy	0.3980055	0.0380633	10.46	0.000
Intentionality → Action	0.2343946	0.033666	6.96	0.000
Intentionality → Advocacy	0.4524765	0.0361287	12.52	0.000

CONCLUSION

This research paper provides an insight into service quality, customer trust, and customer behavioural intention. The study concludes that service quality has positive and significant relationship with customer behavioural intentions in the banking sector. This finding supports the works of [20, 6, 27, 35, 38, 39, and 40]. However, the finding is inconsistent with the work of Cronin and Taylor (18) who found no significant relationship between service quality and behavioural intentions. The study also found that service quality positively and significantly affect customer trust in the banking sector. This finding is in line with the studies of Seigyoung [45] and Yuswanto [78]. In addition, customer trust also affects customer behavioural intentions positively and significantly. This finding also confirms the study by Tonder et al [62]. The study also revealed that trust partially mediates between service quality and behavioural intentions. However, trust fully mediates the relationship between specific service quality dimensions (product and tangible values) customer behavioural intentions. In this regard, the researchers have concluded on the test of the hypothesis as shown in table 10 below.

Table 10: Summary Results of Hypothesis Tested

S/N	Hypothesis	Coefficient	p-value	Status of hypothesis
1	H ₁ : service quality has positive and significant effect on behavioural intentions.	0.5823488	0.000	Confirmed
2	H ₂ : service quality has positive and significant effect on trust.	0.7130104	0.000	Confirmed
3	H ₃ : trust has positive and significant effect on behavioural intentions.	0.6945969	0.000	Confirmed
4	H ₄ : trust fully mediates between service quality and behavioural intentions.	-	-	Not confirmed

The study concludes that, though trust mediation between service quality and customer behavioural intentions is not confirmed, the valued relationship between specific service quality dimensions (product and tangible values) and customer behavioural intentions is fully mediated by trust.

MANAGERIAL AND THEORETICAL IMPLICATIONS

This study has implications for research and practice. On the practical side, the results have shown that service quality is a powerful driver to customer behavioural intentions to do business with banks with or without trust mediation. Therefore, banks should seek ways and means to build service quality to promote transactional exchange and advocacy role of customers. When banks offer good service quality, customers will continue to conduct financial transactions with them and will advocate such values to other prospective customers.

However, banks should improve customer trust especially fiability (welfare) and intentionality (capacity to deliver) thereby reducing customer perceived risk to scale up their behavioural intentions.

Theoretically, CTOP dimensions have successfully measured service quality in the banking sector. Service quality has been noted to influence customer behavioural intentions. In the banking sector, trust partially mediates between service quality and behavioural intentions. Product and tangible values have been identified as important service quality dimensions that influence customer behavioural intentions with trust mediation.

LIMITATIONS OF THE STUDY

This research has some limitations. First, the research has used convenience-sampling techniques in data collection because of the difficulty in using random sampling in Ghana's financial market. This limits the generalizability of the results. Second, the 2018 Bank of Ghana Re-Capitalisation regime is still ongoing. Two banks have been taken over by another bank and 5 more banks have been merged into a consolidated bank. At present, the banking sector environment is tensed with media publicity. This development can affect customers' response to surveys like this type.

FUTURE RESEARCH DIRECTION

Researchers need to explore other market-base factors that can promote banking success like convenience, security, social influence and personal innovativeness that may affect the intention to do business with banks. Another study is recommended after Bank of Ghana Re-Capitalisation requirement is over to measure any possible differences of findings contrary to what this research has revealed. The CTOP dimensions to measure service quality should be applied in different financial sectors in another cultures and/or different service environment. This research is a cross-sectional study and as customer behaviour is dynamic, a longitudinal study may provide further insights into customer trust and behaviour intentions marketing value creation.

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The winds of war to defend the “dollar wall”

Fabrizio Pezzani

ABSTRACT

Honoré de Balzac wrote, “History is of two kinds – there is the official history taught in schools, a lying compilation *ad usum delphini*; and there is the secret history which deals with the real causes of events – a scandalous chronicle”. Perhaps it would be useful to follow his indications to try to understand the official history of the winds of war that daily fill the pages of newspapers and the too many certainties that generate doubt on the secret history. The winds of war that blow in reality seem to be designed to engender the growing hostility of the West, the US and UK in the lead, towards Russia, always accused of acts of subversion towards a western order that is falling apart but having rediscovered the “cold war” formula . . . The vulnerability of the US both in terms of its social and financial order is becoming increasingly evident also due to the incapacity of its elite to understand history in its ebbs and flows, and the technical-financial monoculture depriving it of creativity that is the fundamental resource to face the historical challenge, pushing it almost autistically towards always reiterating the same actions without understanding that the external context has changed. The inability to accept a multipolar world is driving it into a corner, unable to understand how to respond to a geopolitical balance that is redefined to its detriment, and so the only answer it can provide is eternal recourse to the use of force both in the military and the financial field; opponents must be fought, without a constructive recourse to dialogue, but history requires modelling the thought over time, and this shows that the true limitation is the lack of culture to adequately face its enemies, starting from itself, perhaps the main obstacle. The risk of an internal destabilizing clash would thus become a tragic reality, because in history human societies have always and only collapsed for reasons of war and class struggles, and the US is the only Western country to have never had a real social revolution to rebalance the differences in the redistribution of wealth. The drive for personal growth generates the development of man’s primal instinct, aggression, and perhaps for this reason Sigmund Freud with an enlightened vision in 1933 wrote that the US was for him the greatest social experiment in history but unfortunately it would not last long.

THE OFFICIAL HISTORY AND THE HIDDEN TRUTH

Honoré de Balzac wrote, “History is of two kinds – there is the official history taught in schools, a lying compilation *ad usum delphini*; and there is the secret history which deals with the real causes of events – a scandalous chronicle”. Perhaps it would be useful to follow his indications to try to understand the official history of the winds of war that daily fill the pages of newspapers and the too many certainties that generate doubt on the secret history. The winds of war that blow in reality seem to be designed to engender the growing hostility of the West, the US and UK in the lead, towards Russia, always accused of acts of subversion towards a western order that is falling apart but having rediscovered the “cold war” formula. The story of the poisoning of Sergei Skripal with a nerve agent whose origins remain doubtful, and the missile attack in Syria, a test of strength but with limited results, seem to serve to continuously increase the commercial and non-military sanctions imposed on Russia, which however had entered the WTO on 23 August 2012, an organization that aims to reduce trade barriers, while sanctions block them, a curious contradiction that seems to hide a different and more financial than military purpose. The vulnerability of the US both in terms of its social and financial order is becoming increasingly evident also due to the incapacity of its elite to understand history in its ebbs and flows, and the technical-financial monoculture depriving it of creativity that is the

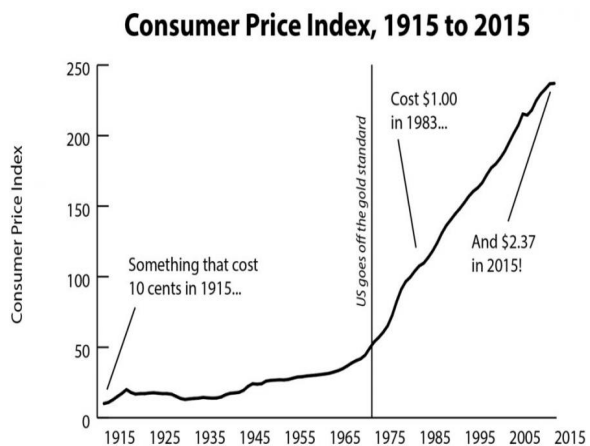
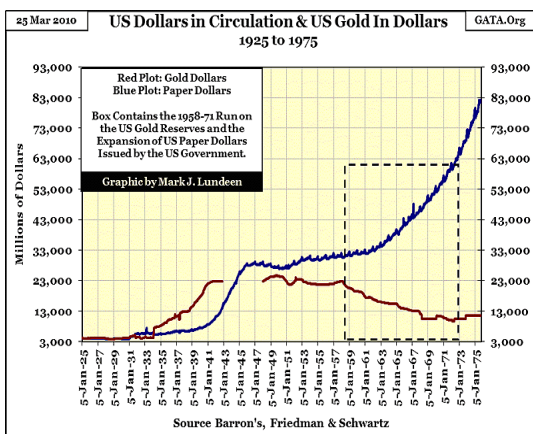
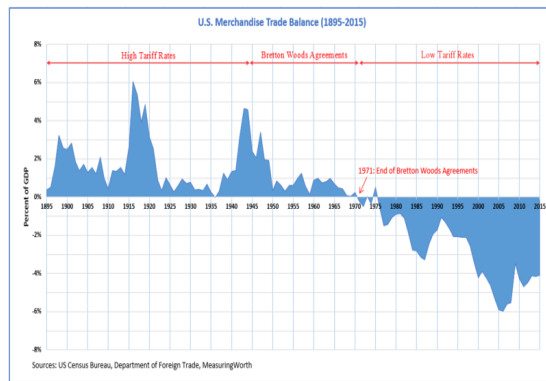
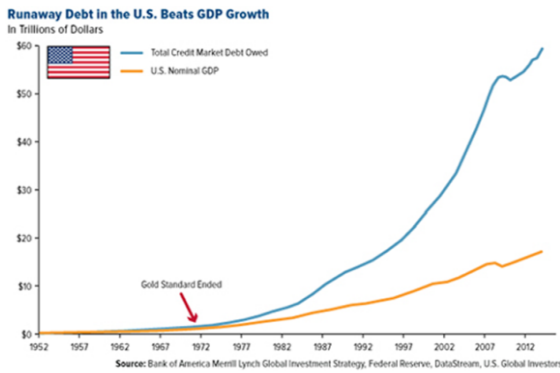
fundamental resource to face the historical challenge, pushing it almost autistically towards always reiterating the same actions without understanding that the external context has changed. The inability to accept a multipolar world is driving it into a corner, unable to understand how to respond to a geopolitical balance that is redefined to its detriment, and so the only answer it can provide is eternal recourse to the use of force both in the military and the financial field; opponents must be fought, without a constructive recourse to dialogue, but history requires modelling the thought over time, and this shows that the true limitation is the lack of culture to adequately face its enemies, starting from itself, perhaps the main obstacle.

The greatest danger to the economic and financial sustainability of the US would appear to be China, holding both its trade deficit and 20% of their debt, without any threat of sanctions but customs duties that do not seem to have significant results. Unlike Russia, China's currency, the yuan, has officially entered into the IMF's money basket, putting the dollar's position at risk as a global reserve currency hitherto maintained with increasing difficulty. The Russian rouble instead seeks international legitimacy as an alternative currency to the dollar that would accentuate its growing weakness by questioning the uniqueness of the Swift system (international payment and interbank system launched in 1973, coincidentally exactly two years after the end of the "gold exchange standard"), which being centred on the dollar supports its dominant position. The potential commercial areas of Russia as an exporter are immense and linked to raw materials - oil, gas, titanium, gold, silver, wheat, etc.; their free trade could offer an enormous space both to foreign investments and to their commercialization in Western countries to the detriment of the US dollar and the US economy in general. Could this be the hidden motivation that blows the winds of war and would make the US's monetary, financial, and social system more vulnerable? War always becomes the continuation of politics in a different way.

1971: the beginning of the monetary era without underlying assets

Let us attempt reconstruct the scenario that is perhaps hidden to us in the daily narration of the war in which it is difficult to divide certainty from doubt; perhaps we have entered the final phase of a large geopolitical confrontation.

This reconstruction requires returning to the year 1971, the year of the global turning point and the transition to finance detached from the real world. The US, no longer able to maintain the link with gold in printing money, unilaterally declared the end of the convertibility of the dollar into gold, throwing the world into a monetary storm. The Vietnam War and the revolting student protests led the country to generate paper money without respecting the link with gold according to the Bretton Woods agreement of 1945 that seemed epochal and stabilizing for commercial exchanges but did not last more than 25 years. The year 1971 was the watershed between the world of the real economy that had created the "golden age" and the new financial world that would create the "financial age": the debt grew, the trade balance became negative, and everything became paper money in a casino without rules in which only computers would dictate the decisions:



The inflationary effects generated by the increasing volumes of printed money would create an uncontrollable disorder in the western world in front of the iron curtain. This pushed US policy to create demand for dollars to maintain its value, thus inaugurating the era of the petrodollar, the price of which has always been functional to maintaining the US dollar as a global reference currency. Two years later, SWIFT was launched, which armoured the dollar in international transactions. In this way, the American economy subsisted by creating volumes of money to cover its problems and download them onto others, increasingly with "manu militari" (military force). The fall of the Berlin Wall in 1989 decreed a unipolar world and "the end of history" as Fukuyama precipitately wrote, heightening the sense of divine omnipotence without limits; but history ends up deluding those who think they can have infinite power, turning against it as a sort of nemesis. In the new century, China, having become a factory of the world, gradually acquired those productive spaces that the American economy based on finance was delocalizing, its manufacturing structure consolidated as did its growth in the global economy, becoming the world's first importer of oil, as the graphs below show.

The entrance of the "petroyuan": history revised

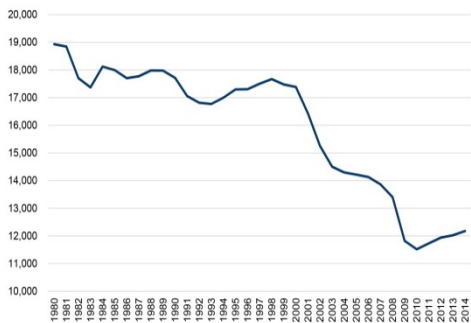
The following graphs would suffice to provide evidence of the reality continuously manipulated by the media and hidden behind the certainties of the façade but increasingly less disguisable.

The graphs show that the financialization of the real economy has deprived the US of manufacturing activities, the only ones that generate real and fictitious wealth; the increasing delocalization has drastically reduced the number of jobs in the manufacturing sector in favour of the services sector, and China with its low labour costs served the "creating shareholder

value" mantra, the true father of all misfortunes. Chinese manufacturing was created as a function of finance, but over time has gathered strength by becoming independent, and silently and in a long-term logic, as in its millennial history, acquiring the spaces that have opened up to it as a "Trojan horse" in the economic heart of the US. US debt and the trade deficit have allowed the Celestial Empire to become dominant in the game of global power. Even the traditional agricultural sector dominated by the US has developed extraordinarily in a country that for millennia survived on agricultural work; its economy has grown, which seemed to awaken from the long sleep that Napoleon Bonaparte himself deemed threatening and distant. As a sort of nemesis, the finance of investment banks, of Wall Street, of hedge funds has created, in the optimization of short-term results logic, an enemy that is slowly suffocating it, leaving few weapons in its hands to defend itself. The immense Chinese territory and its age-old working tradition with rhythms and work times unthinkable for Western countries is an area of dominant interest for foreign investments that see the country as an opportunity for growth that the US no longer seems to offer.

U.S. Employment in Manufacturing Industries

Thousands of Jobs, 1980-2014



Source: Brookings Analysis of Moody's Analytics Data

Metropolitan Policy Program at BROOKINGS

FIG. 3: Sectoral contribution to the change in manufacturing employment due to the China shock

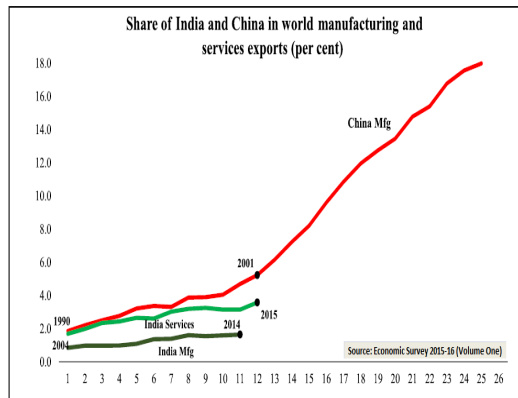
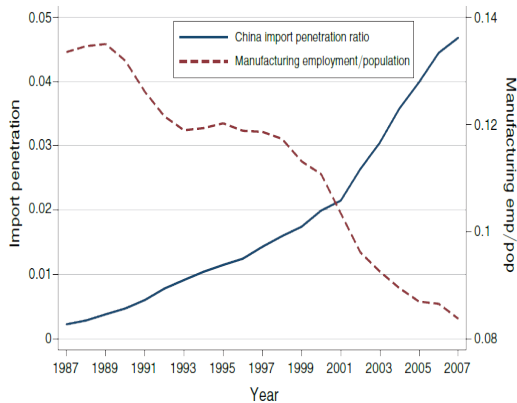
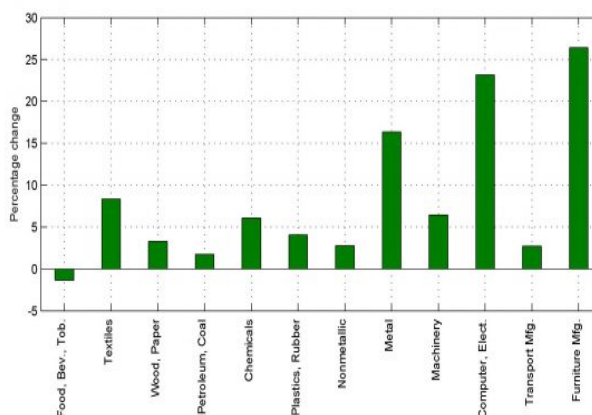
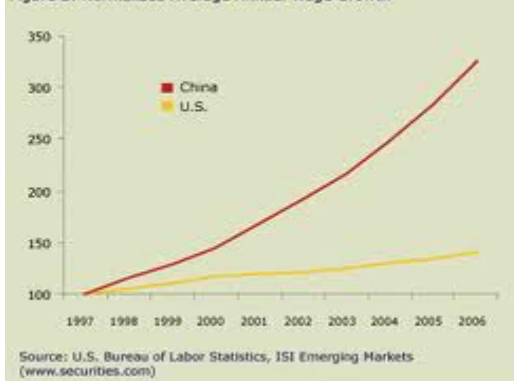
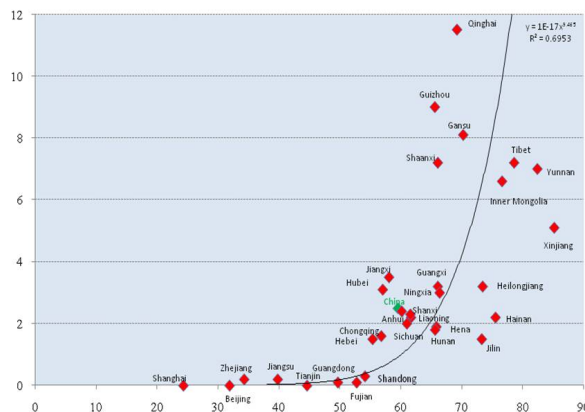
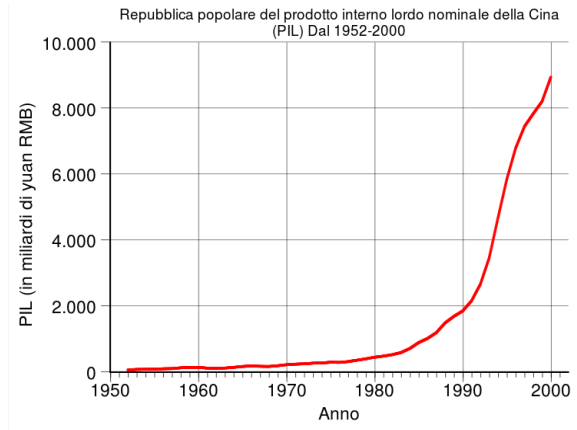
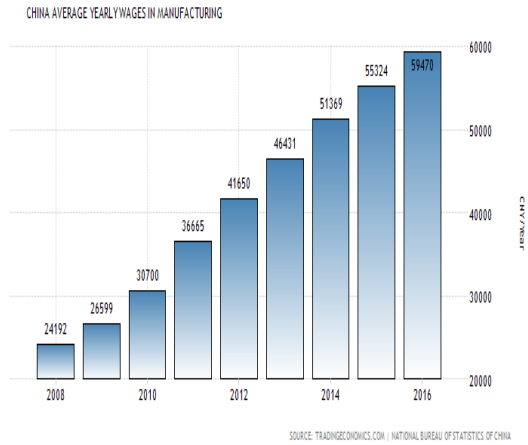


Figure 2: Normalized Average Annual Wage Growth



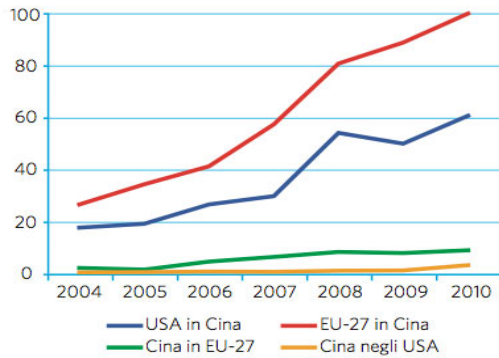
Source: U.S. Bureau of Labor Statistics, ISI Emerging Markets (www.securities.com)



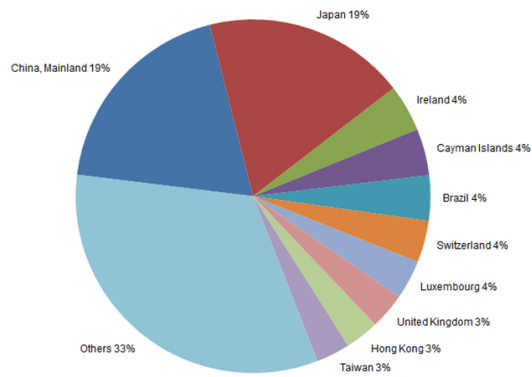


La Cina attrae investimenti

Stock di investimenti diretti esteri in Cina e della Cina all'estero (2004-2011)



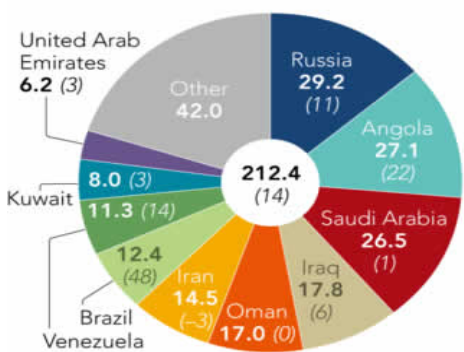
Dati: Eurostat, Oecd (valori espressi in miliardi di \$)



On its path of monetary independence and growing global power, on 26 March, China inaugurated the petroyuan era, opening new and dangerous spaces to destabilize the dollar with a currency linked to gold. It is more difficult to move against China and its power versus the US, but if Russia also entered the money video game, the dollar would end its position as the only global currency and would risk devaluation, since the central banks' monetary reserves are based on the dollar for 63.5%, while the yuan is below 2%, and the rouble is not present; the global economic positions are asymmetric compared to the monetary deposits. However, as is becoming evident, at least to independent financial observers, already in 2018, the dollar's primacy would be challenged by the yuan as a reference currency for setting average energy prices and for the most important raw materials for industrial use. The weakness of the dollar is highlighted by the uncontrolled expansion of its debt, making its sustainability for foreign underwriters increasingly precarious.

Chinese crude oil imports

(in millions of tons)



January-June 2017; year-on-year change in percent, in parentheses
Source: Wood Mackenzie

New Crude-Buying Kings

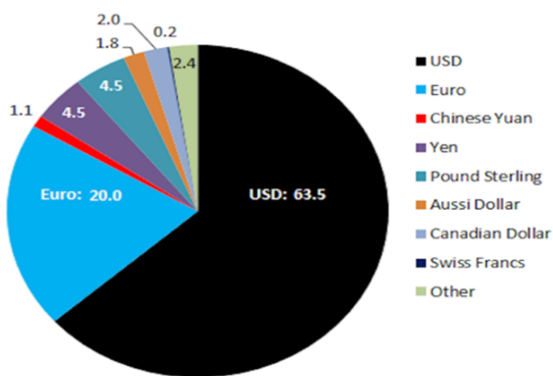


Source: Bloomberg

American and Japanese debt represent 50% of global debt but while Japan has a de facto debt with itself, American debt is located on the international market, and thanks to the role of the global reserve, has always been able to find buyers for its bond issues. But when the internal and external context, the growing weakness in bolstering its currency, and the strength of alternative currencies increasingly drive the dollar and its debt into the frantic pursuit of finding some form of cover, as is happening today, increasing the interest rates, which are the inconsistent expression of its credit rating falsely expressed by companies in a game of collusion and plots resulting from systematic manipulations, the game cannot last long, and recourse to war as always serves to hide other much more devastating problems.

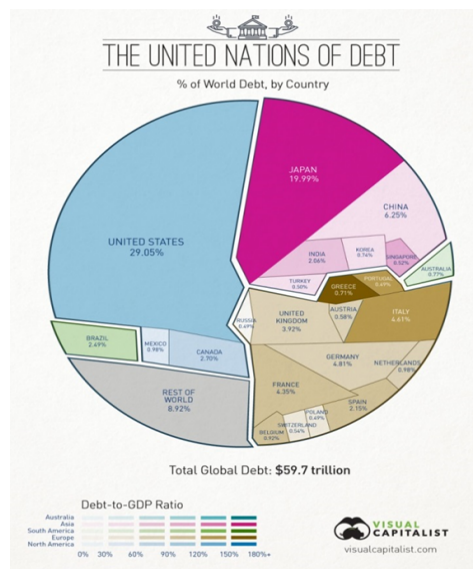
Currency Composition of Official Foreign Exchange Reserves

% of allocated reserves



Source: IMF

WOLFSTREET.com



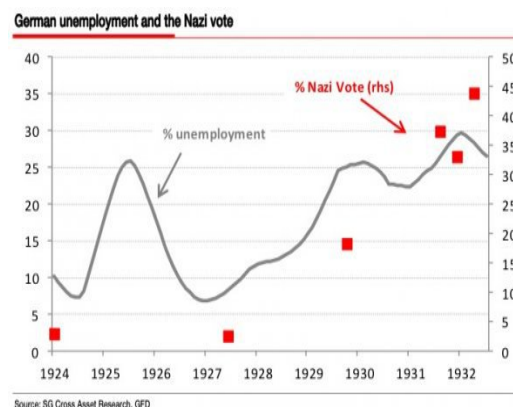
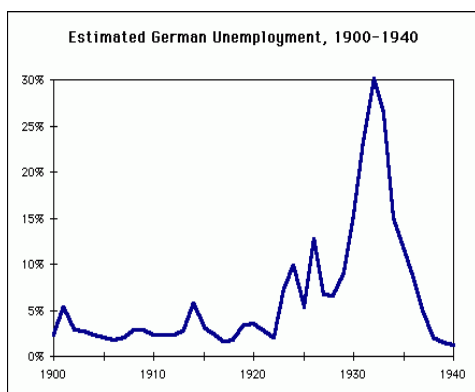
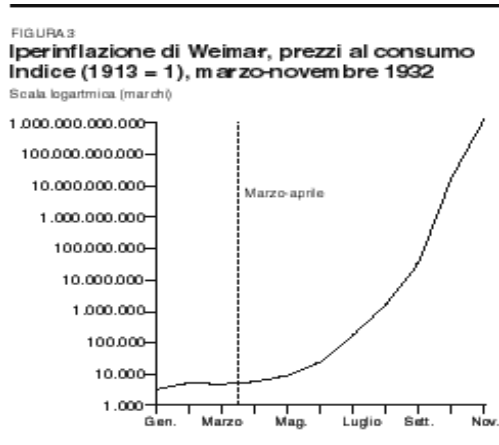
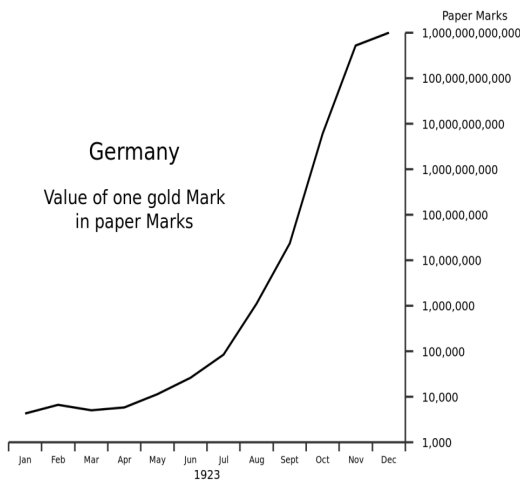
After all, the role of the dollar as a legal means of exchange is no longer appropriate, given that it is the Chinese and not the American market that drives the global manufacturing economy.

History repeats itself: Germany in 1923 and the USA in 1929

In some ways, the drama of the Weimar Republic is recurring, when the mark collapsed due to excess printed banknotes compared to their use; the consequence was the collapse of the value of the mark and this led to the disintegration of the country. Precisely Ludwig Von Mises (Austrian national economist of Jewish origin) studied the phenomenon, similarly to the dynamics of the dollar devaluation, in the book he wrote about a century ago “Die

Gemeinwirtschaft: Untersuchungen über den Sozialismus”, when German hyperinflation was entering the final phase ending with the collapse of the mark in November 1923. Von Mises wrote: “If the practice persists of covering government deficits with the issue of notes (as the US does today - ed.), then the day will come without fail, sooner or later, when the monetary systems of those nations pursuing this course will break down completely”.

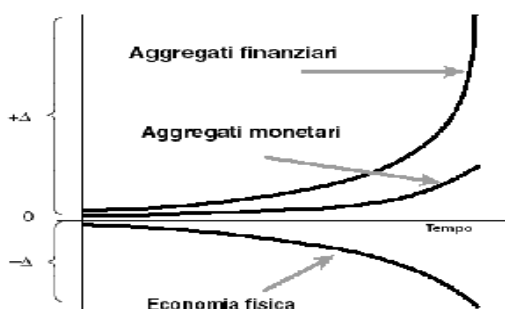
At the outbreak of World War I in 1914, to cope with the huge war effort, Germany abolished the gold convertibility of the mark. When the Great War became increasingly probable, the population withdrew gold worth 100 million marks from the Reich Bank. As a result, the latter suspended cashing in divisional notes and coins. The government pursued the path of State funding by increasing the printing of banknotes. In Germany, during the 1920s, in the political phase known as the Weimar Republic, the term Papiermark was used (German for paper mark) to indicate the banknotes issued to pay war debts by printing banknotes. The winning nations of the Great War decided to charge Germany with the war costs they had sustained. With no regard to the gold reserves that should have secured the currency, Germany kept printing paper money until the debt was settled, which caused the very rapid devaluation of the currency. During the hyperinflation, high denomination banknotes were issued. Coins were no longer minted, except for some series of 200 and 500 aluminium marks, and monetary deposits. The Papiermark was produced in huge quantities: there were also denominations of 100,000,000,000,000 marks (one hundred thousand billion). Day and night, hundreds of paper factories printed new banknotes, stamps, and other values with more and more astronomical figures on them. Public and private, state, regional, municipal, banking, and even private printers issued torrents of marks that were not worth the price of the paper they were printed on. The following graphs show the evidence of the monetary drama of the hyperinflation that destroyed German society, bringing it more and more towards a position of political extremism that paved the way for Nazism:



Only eight years would pass and the finance-economy would once again dominate the real economy and man driven by greed would once again find in monetary speculation, as an end in itself, the drama of social and financial bankruptcy. The dynamics of the great depression that John Kenneth Galbraith strikingly described in “The Great Crash, 1929” published in 1954, had its origins not only in the printing of money not tied to real assets, but also and to a greater extent in pure speculation that had the objective of financial transactions in a short or very short logic totally distant from their real counter value, and as such reminiscent of the dynamics of the German Weimar. Galbraith analyses the concatenation over time of the phenomena that led to the great crisis, hence the historical events of that period, but also the aspects underlying psychological factors that had generated the illusion of wealth and the extraordinary escape from reality that finance would undergo. In fact, investments in equity securities were made not in relation to the value of the real asset that was acquired and the underlying tangible assets, but solely by virtue of the financial margin deriving from speculation: “What is important is that tomorrow or next week market values will rise — as they did yesterday or last week — and a profit can be realized”. Even then, economists, politicians, and the media rejected the danger by deluding themselves that everything would be fine, and just when everything was about to implode, they sustained the end of the great collapse. The transition from a solid to a liquid economy, which brought finance over the real economy, “metafinance” dramatically accelerated the wealth concentration process. The exclusively monetarist approach to finance radically changed the way we create and distribute wealth, financial income exploded with the bubbles that have manifested over the years.

Today history repeats itself, bringing together the weaknesses and criticalities of the two historical moments: currency detached from a real counter value and pure speculation that being based on an infinitely replicable currency no longer has any contact with reality, giving space to pure speculation for the creation of infinite destructive bubbles according to the dynamics in the following graph:

FIGURA 1
Funzione tipica di collasso economico



Moreover, unlike the historical cases, speculation and paper money today operate not only in an infinite world but in a global and supranational dimension, and for the first time in human history, paper money and speculation become "weapons of mass destruction" as Warren Buffett stated, able to exercise political dominance against individual States; but history always presents the bill to homo more “stupidus” than “sapiens”.

In a highly dynamic context for changes in the monetary system, the presence of more credible and reliable currencies will push countries to use them as an alternative to the dollar whose volumes placed on the market will be in surplus over their actual use, generating its progressive devaluation; the effects on the internal market could be disastrous. Once the process has started, probably triggered by the loss of the petrodollar market monopoly agreement, the purchasing power against the yuan will be progressive. It will be in the

interests of the Chinese authorities to promote the yuan as a currency separate from the dollar to encourage foreign trade to abandon it. From the Chinese point of view, a stronger yuan will help ensure greater stability in domestic trade prices when those countries that choose to remain tied to the monetary policy of the dollar will have to struggle with the growth of prices and inflation.

The monetary dynamics based on an infinite paper money have lain the "red carpet" for finance without scientific foundations but functional to a game of global destabilization for those interests that use such finance as a weapon of power. The toxic relationships between academia, finance, and politics have allowed cloaking this finance as incontrovertible truth without anyone opposing or judging the many Nobel prizes given to finance without real scientific foundations; the total deregulation launched by Greenspan in 1999 would lead the world to ruled chaos and found in the 2008 crisis the first dramatic response to a frantic and suicidal race towards a global disaster in all respects, as we dramatically see every single day. Returning finance under the yoke of the real economy will only be viable when the power of the US gradually collides with increasingly determined opponents and is able to propose a return to the convertibility of its currency into a real counter value to control a disorder that is now out of control. The irrationality of rational finance is given by the fact that the US 10-year treasury bonds, which have a triple A (AAA) rating, yield a 3% ten-year rate while the Italian 10-year bonds, which have a triple B (BBB) rating yield 1.67%: a strident contradiction that vanquishes any doubt even in the deep-rooted illusionist of "irrational finance magic".

Social collapse

The separation of paper money from the real finite creates two incompatible systems: the infinite and non-measurable of monetary-finance that is totally deregulated, and the finite and measurable of the real world that becomes fictitiously subordinate to the former. Everything changes and the neoliberal model taken as an end justifies unlimited personal accumulation and the legitimisation of human aggression. Everything becomes finance and pure speculation in virtue of a paper currency that, detached from finite bonds and the real world, becomes infinite and will turn into "macro-usury" capable of keeping companies and entire countries in check. Infinite finance without constraints can be studied with exact mathematical models generating the false idea that financial markets are rational and never err in the allocation of wealth. The study of the finance-economy severs the ties with the humanistic sciences, becoming a pure arithmetic calculation far from reality but assumed as incontrovertible truth thanks to the many Nobel prizes assigned to finance, unfounded but serving higher interests. The search for "maximum shareholder value" to reduce costs leads to the savage delocalisation that separates capital from labour by making it subordinate to the former, but also by countries, because the tax system allows leaving the taxes of black-list countries by the wayside. We passively forget our history and become victims of this finance by transforming ourselves from the best creative artisans in the world into losing and checkmated financiers; the social system disintegrates and fragments, social ills explode and the old solidarity of our people becomes a war of all against all with growing moral degradation because it justifies living to earn and not vice versa. Locust finance must be brought under strict control, eliminating the speculative derivatives that have emptied the reserves, redefining the boundary between business and commercial banks, but also with a return to the convertibility of paper money into gold, as China, Russia, and other emerging countries close to creating an alternative financial system to the dollar are doing, because the new balances of power allow it as we will see in the next section.

The return to the "gold exchange standard": the end of infinite money paper

In this sense, China and Russia are increasing their gold purchases for the convertibility of their currency and again provide a finite and real underlying asset, unlike the US, which continues to keep its gold volume secret; it cannot be long before someone will "see them" as they say in poker. The US, having played all on finance and reasoned in the short or very short term, unlike China that operates under a long and very long term vision, would face a possible devaluation of the dollar and an attack on its social and economic system.

The graphs show the gold acquisition policy of both Russia and China and how this is followed by those countries that at different times accepted the idea of leaving their gold deposits with the US central bank; only Charlese de Gaulle's France retained her autonomy in the custody of her gold reserves:

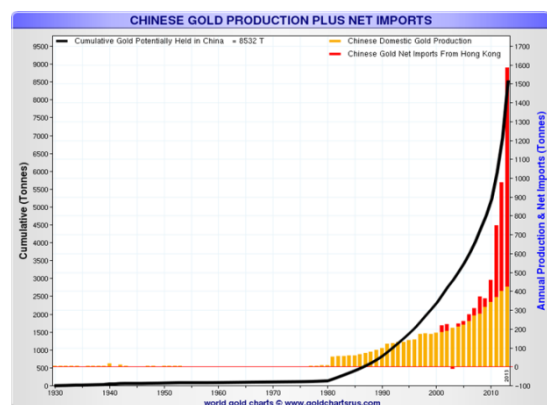
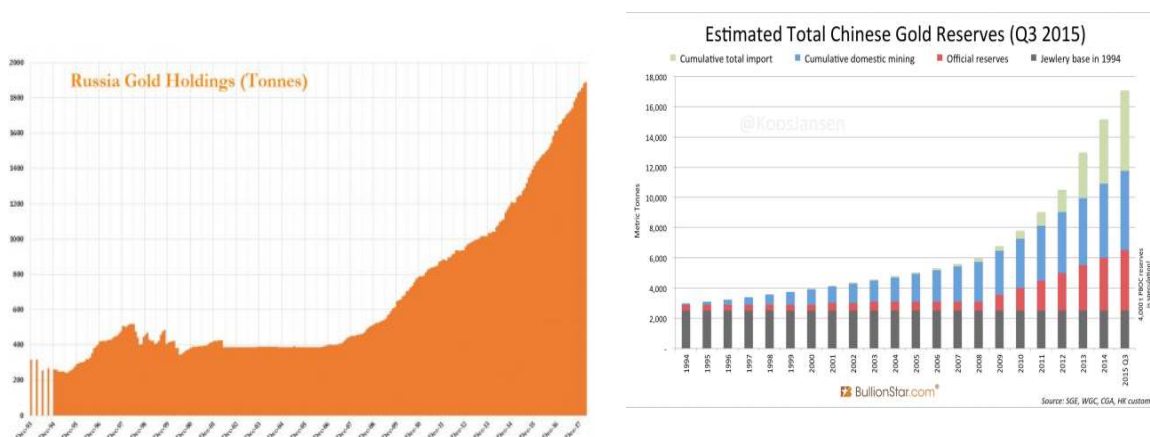


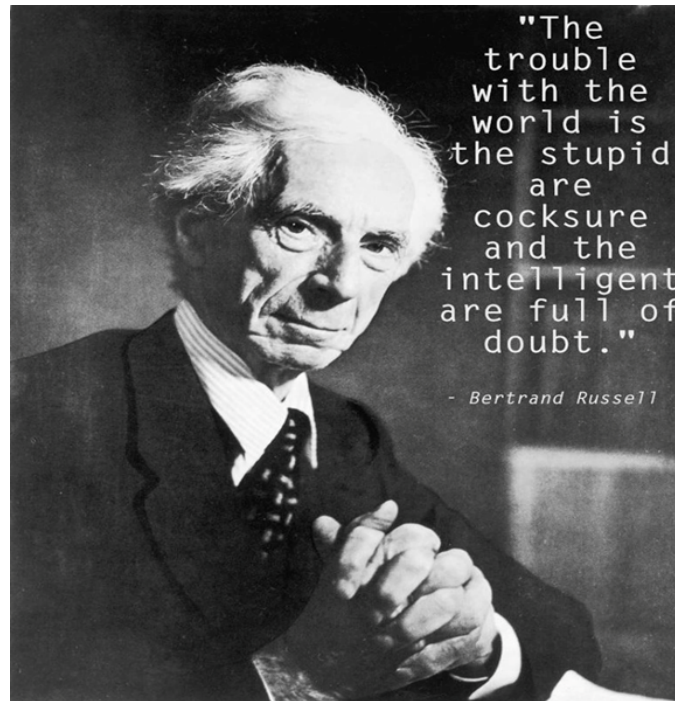
Figure 2: How many milligrams of gold can be purchased for one US dollar?



The outsourced productions would become very burdensome for the already weakened American middle classes that have lost jobs in the manufacturing sector in favour of the service sector, radically changing the composition of its GDP consisting of services – for 23% - and no longer manufacturing – actually 9% (in the UK, manufacturing is now at 4%). The social consequences include the reduction of jobs, unemployment, poverty, moral degradation, wealth made of paper money but without real wealth, inequality that violates its motto "E pluribus Unum", and an unparalleled concentration of wealth in history.

The risk of an internal destabilizing clash would thus become a tragic reality, because in history human societies have always and only collapsed for reasons of war and class struggles, and the US is the only Western country to have never had a real social revolution to rebalance the differences in the redistribution of wealth. The drive for personal growth generates the

development of man's primal instinct, aggression, and perhaps for this reason Sigmund Freud with an enlightened vision in 1933 wrote that the US was for him the greatest social experiment in history but unfortunately it would not last long. Yet, we have forgotten the lessons of history and the teachings of Vico who in his "The New Science" in 1725 affirmed that history repeats itself in cycles because man is the maker of history and his nature never changes, always oscillating between love and aggression, or as the ancient Greeks define Eros and Thanatos. In light of all the considerations made, we may doubt that the fight against Russia is a sort of last wall to defend after the Berlin Wall, but also understand the teachings of history: **only by not accepting certainties and attempting to doubt can we find our freedom.**



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Geomagnetic Variables and US Market Descriptors as Predictors of the Frequency of Use of the Google Search Terms *Anxiety, Depression, Peace* and *Dow Jones*

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ABSTRACT

This research examines relationships between Google search behaviours (frequency of searches) and world geomagnetic and US market variables. Frequency of searches for the terms *Anxiety, Depression, Peace*, and *Dow Jones* were predicted with moderate success ($p < .001$, R values between .31 and .46) from the combination of variables. For example, more searches involving *Anxiety* were performed when geomagnetic activity along the East-West axis and trading volume were both high.

Keywords: Google searches, geomagnetism, market performance

INTRODUCTION

Research has provided convincing evidence of relationships between changes in the earth's geomagnetic field and human behaviour. Weekly geomagnetic variability was associated with an increase in first aid mining accidents (Persinger & Nolan, 1984) and geomagnetic storm activity with an increase in suicide rates (Gordon & Berk, 2003). Artificial magnetic fields were shown to affect emotional states (Tsang, Koren, & Persinger, 2009) and increased geomagnetic storm activity predicted increases in psychiatric admissions (Friedman, Becker & Bachman, 1963). Krivelyova & Robotti (2003) demonstrated that the behaviour of the stock markets was related to the presence of geomagnetic storms, and suggested that the relationship between geomagnetic activity and market behaviours was likely mediated by changes in people's moods. The mechanisms by which geomagnetic variables have their effects is not entirely known, but dysregulation of melanin and the pineal gland, with ensuing changes in the autonomic nervous system, have been thought to be involved (Krivelyova & Robotti, 2003; Gordon & Berk, 2003).

Instead of dealing with extreme and rare events such as suicide attempts, psychiatric admissions, and geomagnetic storms, this research examines their day-to-day counterparts - the use of emotionally negative search terms on Google and daily levels of geomagnetic activity. Google search data have been applied to the study of both mental health phenomena (Nutti et al, 2014) and market behaviours (Preis, Moat, & Stanley, 2013). Because of the

demonstrated relationship of geomagnetic activity to mood, *Anxiety* and *Depression* were two of the search terms examined, and because of the relationship of geomagnetism to stock market behaviours, the search term *Dow Jones* was also included. Weekly frequency of Google searches for these terms, provided by Google Trends, was predicted from several variables reflecting ongoing levels of geomagnetic activity and from two market variables – the Dow Jones Index and Dow Jones trading volume.

METHOD

Weekly worldwide data for Google search frequencies were obtained from Google Trends¹ for 261 weeks beginning May 27th, 2012 to May 21st, 2017. Google Trends publishes relative rather than absolute values. Data were requested for all search terms entered simultaneously: *Depression*, *Anxiety*, and *Dow Jones*. Initially, the search term *Suicide* had also been included, but its frequencies were extremely low (in comparison to the other terms), and markedly skewed (beyond the point of correction by transformation), making it an inappropriate variable for correlational analyses. Because the terms *Depression*, *Anxiety*, and *Dow Jones* were all assumed to reflect negative mood, the search term *Peace* was included in the same request as a comparative term. It was expected that this term would have of a pattern of relationships to geomagnetic activity different from those of the negative terms.

Weekly geomagnetic data for the Earth were obtained from a site in Finland.² Data were available for strength of activity in three dimensions, X (South to North), Y (West to East) and Z (up to down),³ as were estimates of r (overall activity) and ϕ (measure of the earth's magnetic dipole), and an estimate of the variability of each of these over the week, resulting in 10 measures of geomagnetic activity (Table 1). Weekly Dow Jones data were obtained reflecting price (the Index) and trading volume.⁴ Time was represented by a variable indicating the number of the week (1 to 261).

Variables that were extremely positively skewed (frequency of searches for *Anxiety*, *Dow Jones*, and *Peace*, and the Dow Jones trading volume) were submitted to a \log_{10} transformation to correct the skew. There was a considerable time effect in the data. For example field strength along the Y axis and weekly anxiety search frequencies were both strongly correlated with time. These values represent long-term trends that dominate the data but are not the focus of the research. In the first case the trend might be due the sun spot cycles that influence magnetic activity; sunspots were on the rise in the years studied. The second trend is likely the outcome of the increased availability of computers and a rising use of Google searches worldwide between 2012 and 2017. All terms were corrected for time by predicting each variable from time and retaining the residual. After correction, search frequencies for *Depression* and *Anxiety* were correlated ($r=.65$, $p<.001$), and search frequencies for *Anxiety* and *Dow Jones* were correlated ($r=.18$, $p<.05$). There was no relationship between search frequencies for the terms *Depression* and *Dow Jones*. The frequency of searches for *Peace* was moderately correlated with that for all other search terms (*Depression*, $r=.38$; *Anxiety*, $r=.32$; *Dow Jones*, $r=.28$, $p<.001$).

¹ <https://trends.google.com/trends/?geo=US>

² <http://www.sgo.fi/Data/Magnetometer/magnData.php> (Finland)

³ http://www.geomag.nrcan.gc.ca/mag_fld/comp-en.php

⁴ <https://www.investing.com/indices/us-30-historical-data>

RESULTS

Relationships between geomagnetic and market variables and search frequencies are reported in Table 1. Dow Jones volume, which reflects the level of trading activity, was positively related to all four search frequencies; as trading volume rose, searches for the terms *Anxiety*, *Depression*, *Dow Jones* and *Peace* also rose (independently of time). The Dow Jones Index, on the other hand, was negatively correlated to frequency of searches for *Anxiety*, *Dow Jones* and *Peace*; as prices rose, searches for these terms, but not for *Depression*, declined. Searches for the term *Dow Jones* were weakly but consistently related to all measures reflecting the variability of the Earth's magnetic field; greater variability was associated with more frequent searches.

There were several significant relationships among magnetic variables. To allow for simpler predictive equations, all potential predictors (10 magnetic variables and two market variables) were entered into a principal components analysis with a Varimax rotation. The analysis yielded four components that explained 84% of the total variance. The first component had high loadings for all the variability measures and was labeled *Magnetic Variability*. The second component included high loadings for phi and Y activity, a high negative loading for X activity, and a moderately high loading for trade volume. It was labeled *West-East Activity and Trade Volume*. The third component had high loadings for Z activity and r (overall activity), and the final component represented only the Dow Jones Index. These two components were labeled *Up-Down Activity* and *Prices*. Component scores were then employed as predictors of search frequencies in linear regressions with simultaneous entry of all four variables (Table 2).

Prediction was moderately successful in every case and each resulting formula was unique in terms of its significant contributors. Search frequencies for *Anxiety* were best predicted, and they tended to be high when *Magnetic Variability* and *Price* were low, and when *West-East Activity/Trade Volume* and *Up-Down Activity* were high. This means that when geomagnetic activity was strong along all dimensions and steady (i.e. when variability was low), and this activity was accompanied by falling stock prices, more Google users employed the search term *Anxiety*. The only significant predictor of searches for *Dow Jones* was the *Price* component, which was negatively related to it. As stock prices fell, there were more searches for the term *Dow Jones*. Searches for *Peace* increased when *West-East Activity/Trade* was high and when *Price* was low. Searches for *Depression* were highest when *West-East Activity/Trade Volume* was high and *Magnetic Variability* was low. The components employed in prediction were orthogonal to one another (totally unrelated), so the standardized weights in Table 2 also represent the correlations between components and search term frequencies.

DISCUSSION

Data reported and discussed in this paper point to the fact that common everyday behaviours such as Google searches are correlated with week to week changes in levels of geomagnetic activity and can be predicted from such activity and from the behaviours of the markets. Distinct predictive formulas suggest that different processes underlie the use of each of the search terms. All the components representing market and geomagnetic predictors entered significantly into one or another predictive formula. *West-East Activity/Trade Volume* and *Price* were the components making the strongest contributions to prediction. High *West-East Activity/Trade Volume* predicted more searches for *Depression*, *Anxiety*, and *Peace*. This might be the result of the destabilizing influence of high geomagnetic activity in this dimension which led to negative emotions and a heavier than usual amount of trading (jittery markets). High *Price* predicted fewer searches for *Anxiety*, *Dow Jones*, and *Peace*, which could suggest a greater assurance (and a lesser need to search) in times of a high Dow Jones Index.

These data rely on correlational analyses and should not be employed in reaching conclusions about causation. They do, however, point to the existence of multiple systematic relationships between the frequency with which people searched Google using various key terms and world geomagnetic and US market variables. Such relationships warrant continued study.

Table 1 Significant relationships between search variables and US market and world geomagnetic variables ($p < .001$, variables corrected for time)

<u>Market and Geomagnetic Variables</u>	Google Search Frequencies			
	<u>Depression</u>	<u>Anxiety</u>	<u>Dow Jones</u>	<u>Peace</u>
DJ ^a Volume	.31	.43	.28	.19
DJ Price	---	-.27	-.38	-.38
X	-.17	-.26	---	---
Y	---	.21	---	---
Z	---	.15	---	---
r	---	---	---	---
Phi	.13	.25	---	---
sdX ^b	---	---	.12	---
sdY	---	---	.12	---
sdZ	---	---	.14	---
sdr	---	---	.14	---
sdPhi	---	---	.13	---

^a DJ stands for "Dow Jones"

^b sd indicates a standard deviation for a variable across the week.

Table 2 Standardized regression formulas for the prediction of the frequency of Google searches for four search terms from four component scores representing world geomagnetic and US market activity

<u>Predictive Components</u>	Criteria (Search Terms)			
	<u>Depression</u>	<u>Anxiety</u>	<u>Dow Jones</u>	<u>Peace</u>
Magnetic Variability	-.15*	-.12*	.07	-.08
West-East Activity/ Trade Volume	.26*	.38*	.06	.17*
Up-Down Activity	.05	.12*	.09	.04
Prices	.03	-.19*	-.28*	-.32*
$R_{4,255} (p < .001)$.31	.46	.31	.37

*significant individual predictor within the formula, $p < .05$

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The Dilemma On Reconceptualising Natural Resources In Campfire Areas In Zimbabwe

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ABSTRACT

Zimbabwe is indisputably one of the foremost, volatile and vulnerable nations tainted with adverse impacts of the land degradation, poor governance of natural resources, unnecessary burning of the veld and poaching. Hence, there is the need to revisit sustainable environmental management policies and conservation initiatives starting from grassroots level. The CAMPFIRE program in Zimbabwe is one of the strategies designed to tackle environmental management. The conceptual connection of people and conservation of natural resources in Zimbabwe seemed to have evolved towards local ownership and local management. Thus limits of community ownership over natural resources have been reached. According to dominant actors on the conservation scene, the indigenous people in Zimbabwe have not been able to effectively conserve their wildlife and biodiversity and thus in their view a more enforcing style of conservation, separated from local people, is needed again. This study explores and analyses the benefits of conservation and sustainable management of natural resources including wildlife on rural livelihoods with particular focus on rural development. The methods used in this study included focus group discussions, key informant interviews and field observations.

Keywords: Development, Community Ownership, Conservation, Environment, Management

INTRODUCTION AND BACKGROUND

The dilemma of conservation and development is how to achieve one without sacrificing the other and the need to effectively embrace sustainability. Initial attempts have revolved around spatial separation of conservation areas (national parks, wilderness areas), where people other than tourists were largely excluded, from those areas occupied by local people, in which the widespread alteration of land cover in quest of development could occur (Mutandwa and Gadzirayi, 2009; Taylor, 2009). Hence, this solid approach to conservation in Zimbabwe has been extensively condemned as being unsustainable and reckless, because of the gravities on the reserves from people living along the boundaries, demands for the restitution of land from people who were evacuated when the reserves were introduced, and the expenses of managing these pressures (Murphree, 2009; Gandiwa, 2011). On the contrary, progress is slowed down by isolation of local people from vital and critical resource areas in the reserves, which could be used to guarantee economic and social change, and their marginalisation from political decision-making processes about how the conservation areas should be used (Wolmer,

Chaumba and Scoones, 2004; Mashinya, 2007). As an alternative, integrated conservation and development projects (ICDP) or, more broadly, community conservation initiatives have been proposed for consideration. These involve local people participating both physically and politically in the process of conservation while pursuing a development agenda, principally through some form of sustained use of natural resources. The underlying assumption is that the initiative will provide the necessary incentives to conserve the resources and their environment. The corresponding hypothesis is that there are circumstances where conservation concerns and community interests in development join and it becomes possible to achieve both. The track record of such presumed “win-win” situations has been patchy at best. Some believe that these initiatives have provided neither sustained development nor lasting conservation benefits (Logan and Moseley, 2002; Mapedza, 2009; Gandiwa, 2012).

In recent years, the reality of a trade-off between conservation goals and development imperatives has become more widely recognized and reachable. This has given rise to a concept that, to maintain the supply of environmental goods and services for society more generally, incentives are needed to induce local people to forego more disruptive land- and resource-use practices (Mapedza et al., 2003 ; Dickman; 2010). Environmental services commonly exist as positive externalities or uncompensated benefits to users because conventional markets generally fail to value them in ways that recompense land managers for providing them. As a result, the production of these services over time has become progressively degraded (Andrade and Rhodes, 2009; Gandiwa, 2012). More so, attempts have been made to establish values for these services and reward. Henceforth, the underlying assumption here is that the conversion of land from its natural state is largely a function of the net economic benefits that accrue to the land user by so doing. To the individual land user, maintaining the land in its natural state is seldom a more attractive option than its conversion for agricultural, forestry or industrial purposes.

One thinkable initiative is the Communal Areas Management Programme or Indigenous Resources (CAMPFIRE) which started in the late 1980s in Zimbabwe and widely emulated elsewhere in Sub Saharan Africa in the following decade. (Fischer, 2011) point out that the underlying idea of these initiatives places them firmly within the ‘community conservation’ paradigm, but in their functioning they share many features with PES.

The Research Problem

The government of Zimbabwe had been trying to be relevant by adhering to all international bodies and statutes hence attempting to implement the provisions of the Kyoto Protocol's Agenda 21. All government and responsible institutions had established structures for community based natural resource management in respective areas in Zimbabwe. This was in-line with bringing resource governance as close to the people as possible. What remain conspicuously missing are their functional processes. This had led to continued resource deprivation. The structures are there but there is no community based natural resource management. This paper attempts to analyse the institutional dearth that is hampering effective community based natural resource management.

Aim of the Study

The major aim of the study is to find out where organisations involved in community based forest resources are lacking.

Specific Objectives

- To find out organisations involved in natural resources management in Sanyati resettlement scheme

- To explore community based forest resource management initiatives
- To examine where these organisations are lacking for effective community based resource management.

THEORETICAL FRAMEWORK

Evolution of Community Based Natural Resource Management (CBNRM)

It is important to note that there has been increased obligation of the significance of local institutions in the management of resources. Local people are thought to possess vital knowledge on local environments, which can be very useful in resource management. CBNRM has been popular and gained support worldwide of late with most countries of the Global South (GS), multi-lateral development agencies, donors and non-governmental organisations (NGOs) supporting this resource management system (Chigwenya and Chifamba, 2010). Natural Resource Management (NRM) through local communities has been widely advocated for as a solution to the perennial problem of environmental degradation, a problem bedeviling a number of rural areas worldwide. The conception is based on international debates on the role the indigenous institutions can play in natural resource management. The issue of CBNRM was a result of the Kyoto Protocol's Agenda 21 where there was unanimous agreement on the vital role local communities and civic society can play in the management of natural resources (Brown-Nunez and Jonker, 2008; Fischer, 2011). The conference adopted the establishment of local agenda 21 plan at local level. This was thought to enhance sustainable environmental management. CBNRM can be lightly described as a creative process that relies on adoptive learning and action involving people and groups that share and use a natural resource. It differs from traditional policies in that it works with local men and women mainly because of its 'naturalness', it is therefore appropriate in any part of the world, both in countries of the Global South (GS) and Global North (GN) (Mapedza and Bond, 2006; Balint and Mashinya, 2006). Success stories of CBNRM have been told in various countries throughout the world.

In light of the above, there is intensified indebtedness of the weight of CBNRM in creating livelihoods to millions of people particularly in rural communities. More than 90% of World's 1.2 billion poor (bottom billion) depend on natural resources specifically forests for their livelihoods. One third of the world's population still depends on wood for fuel, which calls for concerted effort to conserve forest resources for future generations (Gandiwa, 2011; Andrade and Rhodes, 2012). People derive a lot of benefits from forest resources, which form a very import part of their livelihoods. These benefits can be in the form of building poles, timber and charcoal. They can also venture into environmentally friendly income-generating projects; bee keeping, for example. They can also derive some non-monetary benefits such as ropes, fruits and medicine (Wolmer et.al, 2004). CBNRM, while enhancing rural and urban livelihoods behoves a great interest to environmental planners and policy-makers.

Understanding CAMPFIRE Programme in Zimbabwe

The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) is an initiative which evolved largely around the concept of managing wildlife in the communal areas of Zimbabwe for the benefit of the people living in these areas (Mutandwa and Gadzirayi, 2007; Murphree, 2009).

Its details were first expounded and emerged in 1986 (Dunham et al., 2003; Corrales, 2004) though its base and foundations were recognized about 25 years earlier when the commercial possibilities of wildlife production in Zimbabwe (then Rhodesia) were being explored (Child et al., 2003; Brown-Nunez and Jonker, 2008). Years back, wildlife was considered to be state property, managed by the State and able to be used commercially only under licence (rarely given). The resultant alienation of wildlife from both commercial and communal land

farmers led both groups to consider wildlife as a pest. Overt actions were hurriedly pursued to get rid of animals that were considered a threat to crops or direct competitors for grazing with domestic livestock. More broadly, wildlife was threatened by the widespread transformation of natural habitats to agricultural land, even in agriculturally marginal areas. The government itself undertook massive wildlife obliteration programmes in corridors on the borders of the country in an attempt to halt the spread of tsetse fly (Mapedza et al., 2003; Murphree, 2009), the vector for the livestock and occasionally human disease trypanosomiasis. In short, the future of substantial numbers of wildlife outside demarcated conservation areas was bleak.

Initial efforts to utilize wildlife in Zimbabwe, commercially focused on meat production, on the supposition that wildlife would be better adapted and therefore more productive than domestic livestock, at least in semi-arid environments. As the wildlife industry developed and advanced, however, it became apparent that the economic advantages of wildlife lay less in the biological productivity of the species than in the many different ways that value could be added to the basic product in the form of services offered to the end user. More so, these services can be added at little environmental cost and because consumers are generally willing to pay well for them, wildlife utilization has become an industry with the potential to be both ecologically sustainable and economically viable (Logan and Moseley, 2002; Mashinya, 2007).

The preceding diversification and spreading out of the industry was helped greatly by the introduction of the 1975 Parks and Wild Life Act (Wolmer et al., 2004). Hence, this permitted private landholders the right to use the wildlife on their land for their own benefit, including through safari hunting and the capture and sale of animals. Contrary to many anticipations at the time, the wildlife industry flourished and in 1960s and 1970s there were only five game ranches, totalling 750 km, all producing venison. By the early 1990s and mid-1990s, this had risen to over 216 ranches extending over 57,000 km and were more involved in sport hunting, trophy hunting, photographic safaris, game-viewing tourism, game cropping for venison, and selling live animals (Fischer, 2011; Gandiwa, 2011). Many farmers shifted partly or completely to game farming when, after independence in 1980, the Government of Zimbabwe reduced the levels of subsidies to commercial farmers in favour of greater support to the hitherto largely neglected communal farming sector. As a result of the removal of over taxed services and hiccups wildlife production, which was not controlled by the State, became financially more attractive. By 1990, wildlife production had become a major land use in commercial farming areas in the arid and semi-arid zones, where it was proving to be generally a more financially and economically viable form of land use when compared with single species livestock production (Mapedza and Bond, 2006; Taylor, 2009). This process reached its climax with the development of the Save Valley Conservancy (SVC) in south-eastern Zimbabwe in the mid-1990s, where the owners of 20 ranches, totalling over 3,500 km² agreed on a common approach to wildlife management and the complete removal of livestock and much of the livestock-associated infrastructure, primarily fences.

POLICY FRAMEWORK IN ZIMBABWE

Zimbabwe's Wildlife Policy of January 1992 states that while the executive responsibility for all wildlife rests with the Parks and Wildlife Management Authority, the Minister responsible for the Environment will allow for the management and use of wildlife as a privilege to Appropriate Authorities (AA) for various categories of land outside the Parks and Wildlife Estate, that is Forest Land (Forestry Commission), Communal Land (Rural District Councils), and freehold land (owner/occupier) (Mutandwa and Gadzirayi, 2007). Furthermore, the policy also recognizes that the conservation of wildlife and habitats outside the Parks and Wildlife estate requires the cooperation of rural communities in communal and resettlement areas, and that these must be the primary beneficiaries. The policy was informed by the success and

demonstrated benefits of wildlife proprietorship conferred on private land owners in the commercial farming sector from before independence in 1975.

According to the country's statutes, wildlife belongs to the state, and wildlife is *res nullius*. This means that a wild animal is entitled to natural freedom of movement from one place to another and does not belong to an individual (Dickman, 2011). Therefore, government support through grants, landholders custodianship and privileges regarding use of wildlife that is on one's land and such rights are automatically lost when the wildlife moves to another area. Rural people under CAMPFIRE occupy Communal land that has wildlife on it, but there has been no clearly defined framework in these communities into legal sub-district institutions at village or ward level that meet the conditions for the granting of AA status, as is the case for individuals on freehold land (game farms, private conservancies) (Mapedza, 2009; Gandiwa, 2012). Communities are represented in RDCs through Councillors whom they elect as prescribed in statutes. AA for the management of wildlife on communal land is therefore granted to RDCs as the lowest accountable level of government, on behalf of communities. There is provision that AA status will be reviewed and or revoked if producer communities do not benefit directly.

Community-Based Natural Resource Management in Zimbabwe

This research exploited two well-known and well-established community-based natural resource management (CBNRM) approaches in Zimbabwe: state-forest co-management and CAMPFIRE initiatives. The viewpoint of both initiatives is that local communities need to realise commercial benefits in order for them to sustainably manage local natural resources such as forestry and wildlife (Balint and Mashinya, 2006). This philosophy tries to link costs of managing the resource with benefits from the natural resource.

Stakeholder Involvement and Co-management

Co-management, in theory, seeks to devolve forest management powers to local communities living next to state protected (gazetted) forests in order to prevent resource use conflicts. It involves the creation of environmental or resource regimes featuring partnerships between local communities or resource users and agencies of (sub) national governments (Fischer, 2011; Gandiwa, 2012). These state agencies, the Environmental Management Authority (EMA) and Forestry Commission for example, normally possess the legal mandate for environmental protection.

In Zimbabwe, co-management began in 1993 in villages surrounding the Mafungautsi Forest Reserve. These villages formed 15 Resource Management Committees (RMCs) which were institutions through which benefits such as harvesting broom grass, thatching grass, reeds and firewood permit systems were to be administered. Previously this role was performed by the Forestry Commission's district office (Wolmer et al., 2003; Mashinya, 2007). The proceeds from these minor forest products were then supposed to be used for community development projects such as schools, or to form a revolving fund to be lent to projects such as beekeeping. In the Mafungautsi area co-management received funding from the Canadian International Development Agency (CIDA). Initially, it performed well as CIDA and other stakeholders such as the Centre for International Forestry Research (CIFOR) and the Centre for Applied Social Sciences (CASS) played a mediating role between the community and the Forestry Commission. The Resource Management Committees (RMCs) were formed as sub-committees of the village. Their main role is to issue non-timber resource exploitation permits and help enforce the forest protection rules (Dunham et al., 2003; Brown-Nunez and Jonkers, 2008).

The Impacts of Political Uncertainty on Community Based Natural Resource Management

Conflicts

Wildlife damage and predation on crops affect harvest and endangers villagers and ultimately the wildlife as shown in the field shown in figure 1 below. As human populations grow and expand beyond into wildlife habitat, there have been the predictable conflicts between local human encroachment and wildlife.

Figure 1: The state of maize crop that was ravaged by wild animals



Source: (Fieldwork, 2018)

These conflicts were brought into the international media spotlight by the recent killing of a collared lion near Hwange Park. However, there was no sympathy from the people of Hwange and surrounding areas who have lost relatives and domestic animals to lions. Villagers in areas such as Tsholotsho, Hwange, Dete, Victoria Falls, Zambezi, Bikita and Kariba, among others close to national parks, regularly encounter dangerous animals and it is difficult to balance the benefits they receive from these animals. Andrade and Rhodes (2012) affirm that in many cases, they also risk their lives by guarding their crops day and night, occasionally resulting in fatal encounters. According to the Zimbabwe National Parks and Wildlife Authority, 25 people were killed by wild animals across Zimbabwe during the first quarter of 2011, while 13 sustained injuries. In revenge attacks, villagers killed 10 elephants, five lions and 11 crocodiles, during the same period.

Figure 2: Huts damaged by elephants which had invaded the village



Source: (Fieldwork, 2018)

Damage to crops and property are a daily concern for rural African villages. In one communal area, the local chief states that people in his area had lost 640 cattle, 420 goats, as well as pigs and chickens to lions, hyenas and baboons (Gandiwa, 2012). Crop damage from elephants has

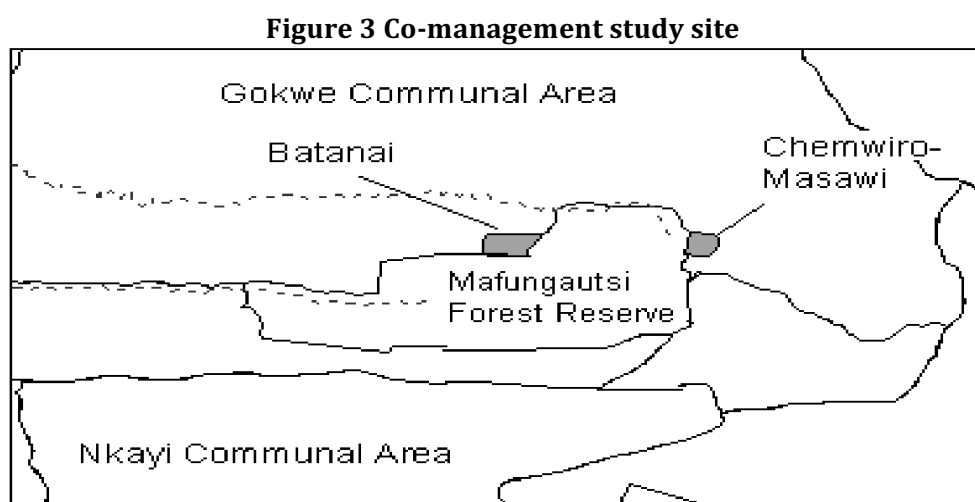
been particularly severe since elephants started moving from the park to the villages, destroying people's crops. The resulting poverty and hunger drove people to start poisoning animals with the indiscriminate toxin, cyanide. Besides elephants, cyanide also claimed the lives of several animal species, among them, lions and scavengers that included hyenas and vultures, as well as other animals such as kudu and buffalo that shared the same waterholes. The killing of the elephants attracted the attention of world media.

METHODOLOGY

This report is a result of follow up longitudinal research studies which were largely conducted by the Centre for Applied Social Sciences (CASS) in areas like Mafungautsi and in Nenyunga and Community Capacity Building Initiative in Africa (CCBICA) from 2012 to 2017 in Mola. The research period stretched from the early 1990s to 2004 and from 2012 to 2017. Field interviews were carried out with members of local communities, current and former committee members of Resource Management Committees and Ward Wildlife Management Committees (WWMC) (CAMPFIRE case study). Key informant interviews were identified within the Forestry Commission of Zimbabwe (FCZ), the Gokwe Rural District Councils (RDCs), Worldwide Fund for Nature (WWF), Centre for Applied Social Sciences (CASS) and Zimbabwe Trust (ZimTrust). Some former CAMPFIRE Collaborative Group employees and researchers also carried out key informant discussions. Literature review was another important tool for data collection. Furthermore, focus group discussions were carried out with representatives from the Forestry Commission and Environment Management of Zimbabwe. The idea was to obtain all the necessary information and statistics required. Field observation was also carried

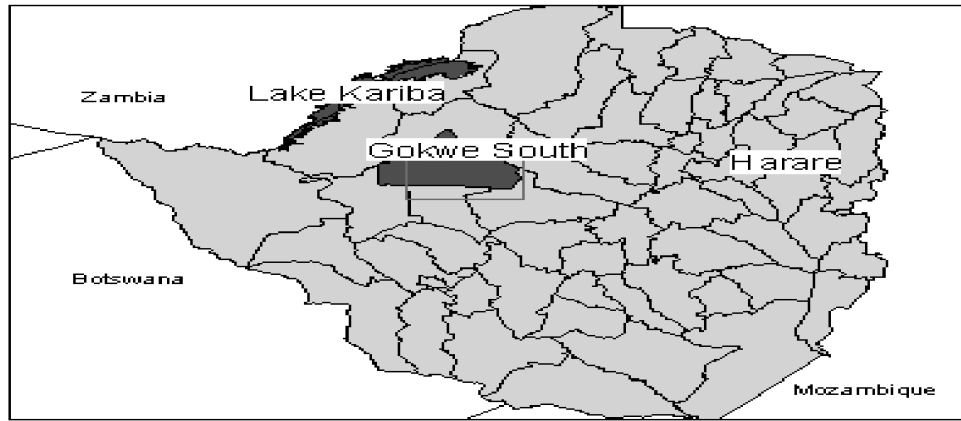
Case study sites

CAMPFIRE research was carried out in Nenyunga ward of Gokwe North District as shown in Figure 3 below. The Ward Wildlife Management Committee (WWMC) in the research area included of three villages. Thus, the co-management case study specifically looked at Mafungautsi Forest Reserve and on two RMCs, Batanai and Chemwiro- Maswi, as shown in Figure 4 below.



(Source: Fischer et al, 2011)

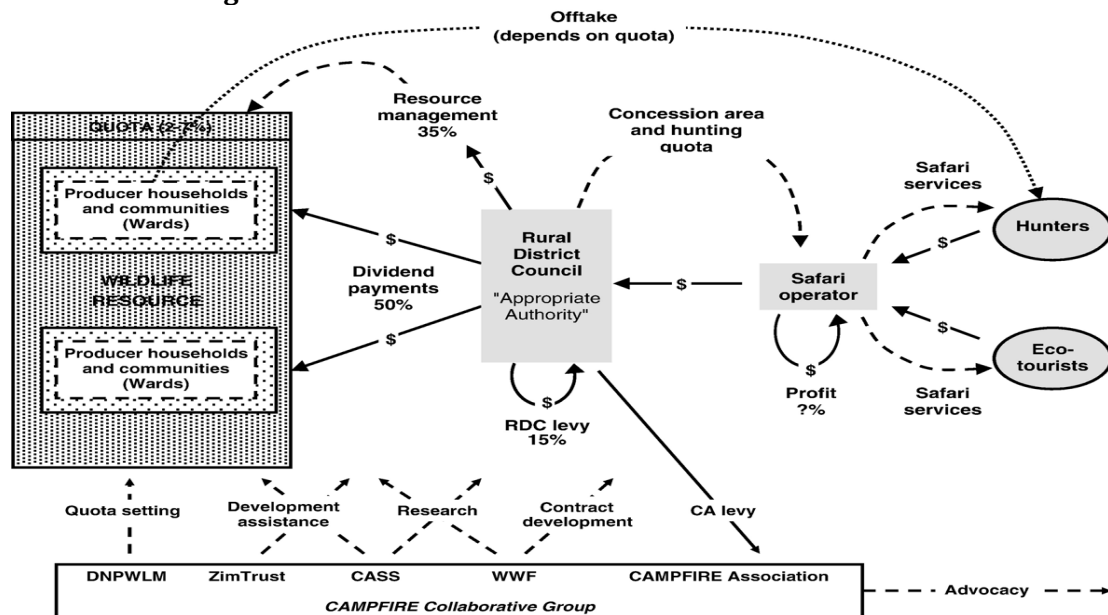
Figure 4: Location of the Co-management and Campfire case study sites in Zimbabwe



(Source: Gandiwa, 2012)

Both the study areas are in the same agro-ecological region, which means that their bio-physical environments are fairly similar. Both areas are largely communal areas with no large-scale commercial farming. In addition, Nenyunga being one of the CAMPFIRE wards, its environment can support a resident wildlife population rather than being an area through which wildlife passes en route to more suitable territories. Both areas also have a similar social political and economic history. This is a frontier region with a number of residents having migrated from other parts of Zimbabwe in search of land. The Gokwe area was seriously affected by political turmoil in the post-2000 era.

Figure 5: General Structure of CAMPFIRE in Zimbabwe



(Source: Murphree, 2009)

Governance and Management of CAMPFIRE Programmes

CBNRM has already yielded positive results in Zimbabwe’s communal lands with nearly all rural district councils having established structures for this programme (Fischer, 2011). Suffice to say that, Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) has established to be the flagship CBNRM in Zimbabwe and it is spreading its wings throughout the country. In addition, its major aim is to strengthen the participation of local communities in management of natural resources (Mashinya, 2007; Taylor, 2009). This has been done through various training programmes for the local people. From a government perspective, one could

say that despite the tremendous turmoil and negative publicity the country is receiving internationally this programme continues to yield tangible results.

CAMPFIRE membership has now expanded to 49 (of the 55) rural districts, representing almost the entirety of the country. This programme had earned a cumulative total of more than US\$20.1million. However while the figures gave an impressive impression at the national level, the situation at household level is very pathetic. The cut-above hunk of the revenue was chewed at national and sub-national level. About 60% of the revenue is absorbed and only 15% reach the communities involved (Mapedza and Bond, 2006; Chigwenya and Chifamba, 2011). This is the major backer to the failure of CBNRM programmes in Zimbabwe and other countries of the GS.

RESULTS, ANALYSIS AND DISCUSSION

Living in close proximity to protected areas imposes costs such as damage to or loss of crops and livestock, and occasionally injury or death of local people (Wolmer et al., 2004; Mutandwa and Gadzirayi, 2007). These costs and expenses escalate as conservation initiatives lead to the recovery of animal populations, and as human population growth surge to an increase in the proportion of land outside the parks that is used for agriculture (Dickman, 2010). The outcomes reveal that human-wildlife conflicts were perceived to be prevalent in the study area between 2002 and 2012. Misunderstandings and conflicts with wildlife over crops, livestock, and human safety issues are known in all four local communities, irrespective of the perceived level of CAMPFIRE effectiveness. In tandem with scientific studies conducted in the GNP (Dunham, 2003; Gandiwa 2011; Gandiwa, 2012), local inhabitants asserted that some populations of large herbivores and carnivores, particularly elephants, spotted hyena, and lions, had increased. These assertions were based largely on recorded increases in crop damage and livestock destruction by large carnivores between 2000 and 2010. However, we recorded a non-significant increase in the number of human-wildlife conflict incidences in the study communities. This non-significant trend could be a result of some local people not reporting incidences of conflict with wildlife. Our results show that most indicators of CAMPFIRE effectiveness were not associated with a decline in experienced human-wildlife conflicts. However, involvement of local people in decision-making was indeed positively correlated with a lower perceived increase in human-wildlife conflict, even though a higher proportion of residents had experienced problems with animals. Elsewhere, in Musamba, northern Zimbabwe (Brown-Nunez and Jonker, 2008) and Tsholotsho District near Hwange National Park, western Zimbabwe (Logan and Moseley, 2002), fences had to be erected between wildlife areas and villages as a way of minimizing human wildlife conflicts. Human-wildlife constraints have been said to be widespread in several community-based natural resources management programs, for example, in Botswana (Murphree, 2009) and Zambia (Andrade and Rhodes, 2012).

Our study findings show that there are differences and similarities in effectiveness of CAMPFIRE programs across the four study communities. Contextual factors across the four communities seem to influence the perceived effectiveness of CAMPFIRE programs. Further investigation revealed that Mahenye, which had the highest ratings for indicators of CAMPFIRE effectiveness despite the decline in Zimbabwe's economy since 2000, was among the first communities in Zimbabwe to implement community-based natural resources management projects before the official launch of the CAMPFIRE program in 1989. Conservation projects in Mahenye started in 1982, and this resulted in the community developing several income-generating projects, including a high-end tourism lodge, which created more employment opportunities, a well-structured anti-poaching team, and awareness and education programs (Chigwenya and Chifamba 2010).

More so, the success of the Mahenye community in CAMPFIRE has been attributed to the commitment of socially dedicated individuals in positions of influence or leadership, the balancing of sources of traditional and popular legitimacy, the presence of an enlightened private sector, the existence of a rich natural resource base, the capacity for flexibility and acceptance of innovation and risk, the existence of intra communal cohesiveness, and the presence of economic incentives in the form of the regular annual distribution of household dividends in an equitable and transparent manner (Murphree, 2009; Mapedza, 2009). However, it has been reported that since 2000, the Mahenye community has experienced challenges with CAMPFIRE because local people have been receiving few benefits and there has been less involvement of local people in decision-making processes related to CAMPFIRE. Despite these challenges, the people of Mahenye have reportedly continued to demonstrate a remarkable level of intra-communal cohesiveness (Murphree 2001). Only Mahenye, Chibwedziva, and to some extent Mola recorded an increase in natural resources monitoring and law enforcement due to the availability of financial resources from the accrued CAMPFIRE benefits. In contrast, monitoring and law enforcement of natural resources was no existent in Chizvirizvi. In addition, the involvement of local people in decision-making in the CAMPFIRE program was very low in Chizvirizvi.

The failure of the CAMPFIRE program in Chizvirizvi has been attributed to the coercive and often violent activities of war veterans within the community, which have eroded the power and influence of both the developmental resettlement committee and traditional leadership; the lack of democratic elections for CAMPFIRE committee; the lack of involvement of local people in management activities or decisions regarding wildlife management; and the lack of benefits to local households from wildlife management (Mashinya, 2007). For instance, Chizvirizvi had the shortest length of community-based wildlife management because appropriate authority was granted only in 2003, whereas in the other three communities, CAMPFIRE has been running since the early 1990s. In addition, of the four communities, only Mahenye had tourism infrastructure (lodges); hence, the community had diversified forms of revenue generation, which increased the community benefits, even during the period of economic decline in Zimbabwe between 2000 and 2008 (Dunham et al., 2003; Corrales, 2004). Chibwedziva is adjacent to an area of the GNP that has a slightly higher density of wild animals, for instance, elephants, compared to the other three communities, which corresponds to the perceived high conflicts. Moreover, differences in human population densities across the four communities could also have influenced variations in benefits accrued by local people, as shown by perceptions of effectiveness of CAMPFIRE indicators recorded in this study.

POLICY RECOMMENDATIONS

The period since the turn of the new millennium has brought uncertainty politically, economically and socially, all of which has affected the running and supervision of natural resources in Mola and Gokwe areas. High inflation has seriously eroded the benefits that most resource managers derive from the communal areas (the annual inflation rate recently reached 1,900%) (Child et al, 2003). Within the forestry sector, proceeds from NTFPs, which have always been low, have been further eroded, making them even less significant for community development projects. One of the main weaknesses of co-management as practised in Mafungautsi is the exclusion of proceeds from timber, leaving the RMCs access only to low value forestry resources.

In Nenyunga, revenue has also been eroded by inflation and the withdrawal of support in the form of transport, Problem Animal Reporters and bullets, all of which now have to be paid for from the diminishing CAMPFIRE dividends. Financial difficulties have also led the RDC to reduce the proportion of revenue it can plough back into the wards. The weakened WWMC has

become subject to the whims of a councillor who was more interested in advancing his interests in the name of the ruling party, at the expense of the initial intended beneficiaries of CAMPFIRE. The previously growing local resource management capacity and knowledge are now being eroded. The withdrawal of external support to both initiatives by CIDA and USAID, largely viewed by the Zimbabwean government as punishment for its controversial land reform programme, has also had a detrimental effect. There is an increasing reversal of most of the pre-2000 achievements, despite their shortcomings. However, the fact that the institutions for resource management in both co-management and

CAMPFIRE still exist is some cause for hope. But these have to be viewed in the context of the increasingly dictatorial policies in Zimbabwe. These local level institutions need to be accompanied by a more democratic dispensation and long-term solutions are needed which can be resilient in the face of continued and significant political uncertainty. The following policy recommendations have two goals: 1) to promote more sustainable livelihoods for people who rely on the two resource regimes; and 2) to sustainably manage the resource base (forests, wildlife) in order to keep on providing a livelihood for the resource dependent communities.

CONCLUSION AND RECOMMENDATIONS

The successful stories and experiences from Dande Communal Land and others indicate that the cost of resource management is embryonic as a foremost determinant of the size of wildlife benefits. This means that the bulk of the benefits from wildlife utilization are being captured by a very small proportion of the total population, that is, those directly involved in managing the resource. Moreover, wildlife consumption has emerged as a major revenue-generating activity within the respective districts, a notable realization which has led to averseness to renounce control over this revenue. However, this is not facilitating the devolution of the benefits from wildlife to the household level.

The major aim and objective is to enhance sustainability by conserving fragile ecosystem and sustain economic viability of the area through wildlife utilisation. The results to date indicate that the interaction between the size of the resource and the size of the human population and its three-dimensional will affect the accomplishment of this objective. The obliteration of the tsetse fly is subsequent in the intra-movement of both humans and wildlife. The sustainability of wildlife consumption programmes is reliant on on low human population densities. The large inflow of incomers is resulting in the key resource areas being used for settlement, which is likely to reduce the productivity of wildlife populations.

A major factor in wildlife management is the understanding and perception that the costs and benefits are achieved when proper decision has been made. Under this project, legal authority over wildlife resources was intended to be passed from the central government to the wards (Gandiwa, 2012). However, at present, the areas and district council holds the legal custodianship on behalf of the wards. Therefore, decisions and authority regarding concrete rights for individual households are the entitlement of the district rather than the individual households and stakeholders who are the de-facto producers of wildlife. It is against this background that it remains to be seen how households will observe and understand wildlife management as an alternative land use when the legal mandate rests outside of their control.

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Parenting Early Age Boarding School Children: Challenges For Parents

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ABSTRACT

Biblically, parents are children's trainers until such a time when the child is adequately grown to take care of themselves. Since parenting is training, it cannot be done effectively with either party being away from the other. Placing children in boarding schools, some at a very early age however breaches this and exposes children to other influencers than their parents. While these influences form their personalities, the question of whether they are well nurtured remains. This paper identifies the challenges that parents face in parenting early age boarding school children. The study used a qualitative design approach. Data was collected using interview with parents, who by then, had their children in boarding school, and those whose children had already gone through boarding schools. A population 200 was targeted in all the four churches. A sample of five (5) parents was purposefully selected from the four churches. The study found out that indeed, parenting boarding scholars is different from parenting day scholars. It also revealed that children in boarding schools exhibited some change in behaviour both negatively and positively. On disadvantages attached to boarding schooling for early age children, this paper revealed that parents risk their children in boarding school to poor feeding, poor medical attention, irresponsible care takers and bullying by older children. The authors concluded that parenting a child in boarding school is challenging. This paper thus recommends ways to improve parent-child relationship.

Key words: Boarding School, Children, Parenting, Challenges, Behaviour, Discipline, Teachers.

INTRODUCTION

Spending sufficient time with a child is a requirement for effective parenting. Parents and their children need to be together, just like a coach and his team, for better training. Among the Jews, parenting involved teaching the children the law of the Lord while the family sat in the house, when they walked by the way, when they lay down and when they rose up (Deut.6:6-7).

In many African communities, the fathers trained their boys while the mothers trained the girls. Parents devoted time to instruct their children in the path to proper character formation. This resulted in having responsible members of the community as highlighted in Jomo Kenyatta's *Facing Mount Kenya* [1].

When children are taken to primary boarding school at a young age, time with their parents is drastically reduced, something that can impede effective parenting. Dobson and Gary in their book, *Children at Risk* [2] report that "A study by researchers at the University of Texas at Dallas revealed that children placed in non-maternal care at an early age were less cooperative,

less popular, and less confident than their peers. In addition, they had poorer study skills and made lower grades” (p. 126). Separating children from their parents early in life exposes children to these risks.

Parenting is an energy consuming but noble task. Wright [3] says, “Bringing up children can be exhausting and mundane, but there is no reason why it should not be enjoyed too” (p. 11). The parents as good shepherds must lead their flocks to green pastures and still waters. They must defend them from the ravenous wolves of the day out to destroy our generation. Parents must always be concerned about their children and correct them from negative influence like the internet abuse. The choice to be a parent is lifelong engagement that one must give thought to before getting involved. According to Campbell and Chapman [4], “The choice to be a parent is the choice to have your heart walking around outside your body as long as you live” (p. 12).

Over years, there has been an outcry of character deformation in the boarding school system of education. Negative influences have been reported especially in the secondary schools. On 15th July, 1991 for instance, nineteen female students of St. Kizito Mixed Secondary School lost their lives in a stampede after male students invaded their dormitory and raped some of them [5]. In this regard, it is noteworthy that homosexuality and lesbianism have become rampant in many schools in Kenya. Drug abuse is becoming a common thing in some boarding schools too. In Nyeri High School, students suspected to have been suspended earlier locked up the school prefects in a cubical in one of the dormitories, doused them with petrol and set them ablaze [5]. In the same weekend, students at Kianyaga Secondary School attacked the deputy school captain’s room with a petrol bomb, which left the students badly wounded.

In addition, early pregnancies have been reported and some end up in crude abortions that lead to the death of the victims. Parents must wake up from their sleep and save their children. They should not entirely leave the parenting responsibility to the teachers. Lickona [6] warns that “even if the schools can improve the student’s conduct during school hours, the likelihood of lasting impact on the character of a child is less when values are not reinforced at home” (p. 36). Some parents take their children as young as seven-years-old to boarding schools. Life in boarding school, at that age denies the child an opportunity to be childish. Play time in boarding school is limited and most of the time is spent in class. Boarding schools become a jail to the child [7].

It is the parents’ responsibility to raise their children up until they are able to stand on their own. After that, they should be left to choose their destinies. McGinnis [8] says, “One of the most important lessons we as parents must learn is to let go our adult children and let them live with consequences of their decisions” (p. 102). Parting with the children is one of the most difficult decisions parents must make. However, a time comes when they have no choice but to let go the children, to discover life on their own. Responsible parents keep an eye on the young adult, to make sure that they do not go in the wrong direction. This makes parenting a life-long process.

As discussed in the foregoing introduction, it is vivid that parents face a number of challenges in parenting children in boarding schools. Literature reviewed elicited diverse forms of challenges posed by external environment to proper parenting. These challenges are summarised into four main categories namely: social, economic, emotional and spiritual challenges.

Social Challenges

The influence at school affects the character and behaviour of the child, and it may become difficult for the parents to guide and direct the child. Considering the short periods of time the parents have with their children, the influence at school supersedes that of the parents and the family. Children may pick bad habit out there that may ruin their entire lives. However, Dobson [9] advises children not to conform to the ways of this world, but to take control of their behaviour, mind, body, and life (p. 53).

Economic Challenges

It is more expensive to take children to boarding schools than day schools. Considering that the parents have to pay for the boarding facilities and provisions, more money is required at school. Parents have to dig deeper into their pockets to maintain the wellbeing of their children at boarding schools. Wright [3] says that family life is dynamic. It never settles down. It always brings new challenges (p. 117). By taking their children to boarding school, parents should be ready to face a new challenge of financial requirement.

Emotional Challenges

The idea of separation of the parents and the children has side effects to both parties. The children live in loneliness of being away from their parents and other siblings and this may cause nostalgia, affecting them in their studies negatively. "Between 11 and 22 percent of the nation's children suffer from some type of mental or emotional disorder" [10] (p.165). Additionally, some parents live in fear wondering how their children are faring on in school. Such parents keep calling the school to find out how their children are doing.

Spiritual Challenges

Not every school will take care of the children's spiritual wellbeing. The child may drift back from the spiritual care provided at home while being away from the parents. Parents have to choose between spiritual and academic welfare of their children. Most of them consider the latter, leaving the child without spiritual care. This will have a negative effect on the child's spiritual state now and in the future.

MATERIALS AND METHODS

According to Creswell [11], "employing the wrong research design would be likened to asking the wrong question" (p. 60). Descriptive design was adopted for the study to collect information about relationships and experiences by looking for correlations and making predictions based on the data [11]. Selected parents in Calvary Temple churches in Kikuyu Township were interviewed. This was the most suited place as the authors had had some contact with the members from these churches for a period of time in the past and the Overseer of these churches and so it was easy to reach the parents who had children in boarding primary schools.

The study examined a population set drawn from the selected churches of Calvary Temple in Kikuyu Township. Parents with children in the boarding school, and those whose children had completed their primary school course but had gone through boarding schools were interviewed. The study was carried out in 4 different congregations of Calvary Temple. The total number of parents in the four churches was 500. However, the parents who had children or who had had children in boarding school were approximately 200. These were parents in the four different churches which are under Calvary Temple in Kikuyu Township. This meant that the population in each church was approximately 50 parents.

Purposive sampling technique was used for the study. The respondents (five parents) were purposefully selected from each of the four churches. In total, 20 parents were interviewed. According to Gorden [12], “interviews provide a rich and detailed description of the human experience” (p. 61).

Data analysis was done using a Statistical Package for Social Sciences (SPSS) and findings presented in form of graphs, tables, frequencies and percentages. Data from interviews were transcribed and reported according to specific themes.

RESULTS

In order to establish the challenges parents face in parenting their boarding school children, authors examined the difference between parenting children in boarding school and those in day schools; behavioural changes for boarding school children and challenges that parents go through in parenting such children.

Difference in Parenting a Boarding School Child from a Day School Child

It was necessary to examine how parenting these two groups of children differed. This aimed at eliciting aspects that bothered parents with regard to children in boarding schools, vis a vis children in day schools. Respondents were asked if parenting a child who is in boarding school is different from other forms of parenting. The results of the findings are presented in table 1.

Table1: The difference between parenting boarding school children and other forms of parenting

Differences of parenting in boarding	Frequency	Percentage
Bonding time is less	7	35%
Makes parents' responsibility lighter	4	20%
Monitoring is dismal	3	15%
Peer influence	2	10%
Discipline is instilled	2	10%
Cost is high	1	5%
No difference	1	5%
Total	20	100%

Source: Author (2016)

At least (35%) of the respondents agreed that parenting a child who is in boarding school is different from other forms of parenting because the bonding time with the child is less. The respondents claimed that when the children are away for too long, the time of separation denies the parents sufficient time for parenting them. The respondents pointed out that separation with the child denies the parent quality time to nurture, care and mould the child at an early stage.

Some parents (20%) opined that parenting a child who is in boarding school makes their responsibilities lighter. The respondents claimed that in boarding school, children are well taken care of, they get feedback from the caretakers, have the opportunity to put into context the child's experiences in boarding school and that they pay attention to their children when they return home during holiday breaks.

It was found out that parenting a child who is in boarding school is different from other forms of parenting because monitoring the child is dismal. This is evidenced by 15% of the respondents who consented to that. The respondents pointed out that the parent is not able to monitor the child's character on a daily basis since child growth takes place almost daily.

Peer influence was the other aspect was responded to. This aspect had (10%) of the respondents claiming that parenting a child who is in boarding school exposes the child to be negatively influenced by the peers. They added that children in boarding schools compare and compete with each other on social status, hence putting pressure on their parents by demanding items and treatment of a higher status than what their parents can afford.

Only (10%) of the respondents thought that parenting in a boarding school helps in instilling discipline. The respondents pointed out that their children had become better in terms of discipline since they were taken to the boarding school. They said that their children had become self-driven. However, (90%) of the parents thought otherwise; that parenting a child in boarding school does not guarantee discipline in the child.

Only one of the respondents supported the fact that parenting a child in boarding school is more expensive than in day school. Even though this percentage (5%) cannot be used to conclude that parenting in boarding school is more expensive, it sheds some light on what could bar some parents from sending their children to boarding schools. Again, and more importantly, it shows some aspects in parenting boarding school children that differ from parenting day scholars.

Behaviour Change Because of Boarding School

Behavioural change was another aspect that needed to be examined in attempting to unveil the challenges of parenting children in boarding schools. Respondents were asked whether they noticed a change of behaviour in the children as a result of being in boarding school, both on positive and negative notes. The results are presented in Table 2.

Table 2: Change of behaviour as a result of being in boarding school

Change of behaviour	Frequency	Percentage
Become more responsible	5	25%
Better disciplined	3	15%
Character formation	3	15%
Emotionally affected	3	15%
Self-esteem improved	2	10%
Negative peer influence	2	10%
Dropped spiritually	1	5%
Total	20	100%

Source: Author (2016)

Only 5 (25%) of the parents mentioned that their children have become more responsible as a result of being in boarding school. The respondents pointed out that the children became better organized, mature and more responsible in the way they behaved. The percentage presented is a clear indication that 75% of the parents think otherwise and have not seen any change in behaviour as pertains their children's responsibility because of being in a boarding school. However, 15% of respondents consented that they noted a change of behaviour in their child who became better disciplined. The respondents claimed that their children had improved in behaviour, become morally upright. However, in relation to behaviour change related to character formation of a child, 15% of the respondents consented that children were better exposed to great character formation in boarding schools. The respondents mentioned that their children were able to make their personal decisions and had portrayed a mature mentality. This was seen as a positive contribution boarding schools had on children.

Equally, 15% of the respondents claimed that boarding school affects the emotion of children. The respondents said that their children in boarding school prefer to keep matters to

themselves in privacy and even seek solutions solely. They further pointed out that the children become stressed because of pressure to perform better and attain higher grades. One respondent reported: “My child felt abandoned in the first few months. She hated it all, being away from home, she was emotionally affected while in boarding school” (R₀₀₃- Personal Communication, 2016). Contrariwise, 10% of the respondents indicated that child’s self-esteem was improved while in boarding school. In this regard, the respondents mentioned that personal confidence is formed in boarding school and explained that the child is able to express himself/herself better, socialize better and learn to choose good friends.

However, a few (10%) of the respondents claimed that their children developed a negative attitude in life because of the negative peer influence in boarding school. One respondent mentioned that, “I noticed love messages on my son’s phone; this was a clear indication that he was already influenced by his peers in a negative way” (R₀₀₆Personal Communication, 2016). The respondents mentioned that their children went through hard times to cope with negative behaviour from the peers in school. Only 1(5%) of the respondents claimed that the children had dropped spiritually because of boarding school. The respondent argued that, “My child no longer had the zeal for the things of God such as attending church services and reading the Bible since he attended boarding school” (R₀₀₄Personal Communication, 2016). The respondents said that the boarding school did not put much effort to teach the children spirituality.

Disadvantages of Boarding School

After knowing how parenting boarding school children differed from parenting day scholars and how behaviour changed when children learn in boarding schools, it was necessary to examine the disadvantages of parenting their children in boarding schools as it posed challenges to the parenting process. The respondents pointed out some of the disadvantages of boarding school on their parenting role. The results are presented in Table 3.

Table 3: Disadvantages of boarding school

Disadvantages of boarding school	Frequency	Percentage
Bonding time is less	6	30%
Responsibility in underage	2	10%
Negative influence from peers	2	10%
Cost is high	2	10%
Drop in academic performance	1	5%
Spiritual side affected	1	5%
Poor feeding	1	5%
Bullying by other students	1	5%
Poor medical attention	1	5%
Irresponsible care takers	1	5%
Discipline is low	1	5%
Child experiences home sickness	1	5%
Total	20	100%

Source: Author (2016)

Out of the 20 respondents, 6 (30%) of them agreed that the bonding time with the child in boarding school is less. The respondents mentioned that the child is denied time for parental love and participation in the family affairs while the parent has no time to play their parental role thus has no opportunity to discover negative behaviour of the child on time.

The respondents further said that boarding school creates separation between parents and children. One respondent said that, “Separation creates a big gap with family members; our youngest child considers our first born a stranger in the family who visits only during holidays”

(R004Personal Communication, 2016). This has an implication on family togetherness and leads to weak ties between members of the family.

Some (10%) of the respondents argued that boarding school mounts much responsibility to the children who are still underage. The respondents mentioned that children in boarding school suffer a lot of pressure from parents to perform higher; the children on the other hand suffer too much academic concentration hence they become stressed up.

Another disadvantage of boarding school as supported by (10%) of the respondents was that children suffer negative influence from peers. The respondents mentioned that children are forced to learn bad behaviour from their friends which in turn destroys their good moral values. The respondents also mentioned that children who have been negatively influenced pressurize their parents to provide them with things they want other than needs when they go back home such as demands to watch movies and smart phones, among others.

High cost was also attributed to maintaining children in boarding school as (10%) of the respondents claimed that boarding school is very expensive. One of the respondents said that, "I pay a lot of money every month for my son who is in boarding school. At times I am forced to take a loan from the bank to meet the financial demands of the school" (R008Personal Communication, 2016).

Academic performance is one major aspect to measure in school and while some parents prefer boarding school to boost their children's academic performance, 5% of them in this study said that when children go to boarding school, they drop in academic performance. The respondents argued that the condition of the boarding school in most occasions is not favourable to the child. This in turn affects academic performance of the child. On the other hand, some (5%) of the respondents argued that the spiritual side of the child is affected when they are taken to boarding school. The respondents pointed out that children may lose family values especially spiritual values.

One respondent said that the child while in boarding school lacks proper feeding because of poor diet of the school meal programmes. The implication here is poor health of children whose growth rate is still high and needs proper food supplements to enhance growth and development. Immunity too can be affected leading to continuous and recurrent illnesses that required hospitalisation in severe conditions, thus attracting financial challenges as discussed earlier. Where there are financial constraints, poor medication becomes the end result. This may happen at home or at school as one (5%) of the respondents mentioned that there is poor medical attention in boarding school. Evidently, the whole issue of medication becomes a stumbling block to academic performance as ill students stay away from school while under medication.

Only 1 (5%) of the respondents argued that bullying may occur in boarding school by the older children. The respondent reported that children were bullied during the first years of joining the boarding school. As such, distress sets in disturbing the whole learning process. It also ignites issues of superiority and inferiority complexes. When one feels inferior, confidence is drastically interfered with leading to situations where children fear to express themselves in public or even when with their parents. Some may choose to be introverted and, in most cases, they may not express their problems. Instead, they may choose to seek solutions by themselves or among the peers. Thus, they may end up getting inappropriate solutions.

One (5%) of the respondent claimed that there are irresponsible care takers in boarding who may sometimes mistreat or mishandle the child. If the care takers are not keen in handling juveniles at school, behavioural issues arise. For instance, when the care takers are partial in treatment, gender insensitive or too strict, issues of rejection and hatred come up. These affects the general behaviour of the child, thus indiscipline cases.

One (5%) of the respondents claimed that discipline is low in boarding school. The respondents argued that teachers concentrate more on academics than discipline issues. In light of the heavy responsibility at boarding schools, that would otherwise be done by parents, teachers have been overwhelmed. Thus, they tend to give more attention to the academic achievement other than discipline. Little do they know that for a good performance, discipline among students is central and ought to be given proper attention by both teachers and parents. Parents seem to have delegated their role in discipline management to teachers which should not be the case.

Lastly, homesickness affects early age children in boarding schools. One (5%) of the respondents claimed that a child in boarding school becomes desirous to be home; in most cases the child feels lonely. Most of the children are taken to boarding school at an early age which separates the child from the parents at the time when they have to be in school thus missing their parents. According to the respondent, homesickness was identified as debilitating to children's capacity to flourish socially, emotionally and academically whilst at boarding school.

DISCUSSION

The elements of parenting children in boarding school revealed make it different from parenting children who are in day school. Thus, a significant difference was established. However, there was one parent who thought parenting in boarding school is not of any difference with the other forms of parenting. This was supported by her opinion that just like parents, school caretakers do that which a parent would have done thus plays the parental role well.

Again, the study noted a change of behaviour of children as a result of being in a boarding school. According to the findings, some respondents indicated that the child in boarding school becomes more responsible. It is reported that children became disciplined and developed in character while in boarding school. Self-esteem of the children was also said to improve in boarding school. However, child's behaviour was negatively affected. The study found out that children in boarding school had a negative peer influence, emotionally affected and had dropped spiritually. According to Lafrance and Collins [13]:

Those who attended residential schools report that the residential experiences were extremely painful and avoid introspection of this highly emotionally burdensome and damaging experience. Others who did not attend are indirectly affected because they cannot understand why an educational experience should leave such bitter emotional scars (p. 106).

Further, boarding school was found to have some shortcomings. One of them is less bonding time between the parent and the child. The study showed that separation between the parent and child has a negative effect to the both parties. According to Lafrance and Collins [13]:

The practice of separating children from their parents and their way of life had a drastic impact on almost all Aboriginal families. The structural, cohesion and quality of family life suffered. Parenting skills diminished as succeeding generations became more and more institutionalized and experienced little nurturing (p. 106).

According to Walker, Colvin and Ramsey [14], “the parent-child contact is the important thing and the activity chosen is usually incidental to the time spent together and the positive interactions that occur” (p. 299). Okorodudu [15] has noted that, “...parents spend little or no time at home to assist in the upbringing of the children. The children invariably fall into evil association” (p. 63).

Setting high responsibility among underage was also identified as another disadvantage of boarding school. Negative peer influence, high cost, drop in academic performance, drop in spiritual life, poor feeding, poor medical attention, irresponsible care takers, low discipline and the child becoming nostalgic are other disadvantages identified. Unger [16] argues that, “Extracting small children from their parents...and keeping them away from their influence, caused parents and children to become strangers to each other” (p. 16). According to Okorodudu [15], “The incidence of parental separation may result in adolescents’ embarrassment, depression and even make them miss school, perform poorly academically and participate in delinquent behaviours” (p. 62).

The study also established bullying as another disadvantage of boarding school. According to Walker et al. [14], “Bullying is a form of highly aggressive behaviour that involves coercion, intimidation, and threats to one’s safety or well-being” (p. 189) while Walton and Goddard [20] define bullying as, “a form of poor behaviour that causes particular unhappiness and disruption to the learning of individual pupils” (p. 44). They argue that, “Bullying can involve one-on-one situations but more often involves intimidation of a single individual by a hostile group of peers” (p. 189). According to Walton and Goddard [17], “Anyone can experience bullying, but there is evidence that some groups, including disabled children and looked-after children, are more likely to be bullied than others” (p. 44). Walker et al. [14] (p. 190) suggest that, “High rates of bullying in a school are often a precursor to violence and should be a red-flag indicator that immediate and drastic actions need to be taken to reduce them”.

Regarding irresponsible care givers, Yue, Yaojiang, Fang, Chu and Huan [18] argue that, “. . .school personnel are poorly trained in boarding school management and lack sufficient time to provide care and support to boarding students-especially for ones as young as those in elementary school” (p. 524).

CONCLUSION

Parenting children in boarding and day schools differs in various ways. Thus, they are never the same as supported by the evidence in the previous section. Behaviours too may change when one changes school from day school to boarding. This implies that boarding school has an impact on behaviours of children. The negative changes in behaviours pose a challenge to parenting in that being away from parents, it is easy to indulge in unbecoming ways as a result of environmental influence and lack of close monitoring. Parents recognized that parenting a child in boarding school is challenging. They risk their children in boarding school to poor feeding, poor medical attention, irresponsible care takers and bullying by older children. Sending children to boarding school also places financial burden on parents while homesickness is experienced by some children, frustrating the child’s capacity to flourish socially, emotionally and academically while at boarding school. Concern was also revealed regarding academic pressure being linked to high parents’ expectation. The findings showed that children taken to boarding school for the first time dipped in their academic performance, yet their parents expected them to perform highly. Parents felt that their children were pressurized to perform better regardless of their weakness. All these issues imply negatively on parenting as there is little time for parents to monitor their children’s behaviour and guide through.

RECOMMENDATIONS

Given the challenges in parenting a child in boarding school, this paper proposes nine ways to improve parent-child relationships. They include: parents to spend more time with their children, regularly visit their children in school, close monitoring of behavioural changes by teachers, positive parenting techniques, spiritual support, financial support, parents discuss discipline related topics when with their children, and encourage open communication with the children.

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The Impact of Domestic Violence on The Learning Process of High School Students

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ABSTRACT

Exposure to domestic violence among high school learners is one critical issue in schools that needs to be brought at the forefront in understanding dynamics involved and its impact on the learning process. A range of effects not limited to decreased educational performance and behavioural problems arise from domestic violence. Mistakenly, most people fail to see the harm caused to a child living in an abusive household unless physical abuse is extended towards them. Authors of this paper recognize the impact, other than physical, and explore how domestic violence affects the learning process of students in high school. A descriptive design was adopted for the study. With focus in Migwani Sub-county, schools were stratified into two, i.e. girls' and boys' schools. A sample of 56 respondents was then conveniently obtained from 10 public schools. This included students (30), teachers (12), principals (10) and parents (4). Questionnaires and interviews were used to collect data. Data were analysed using the SPSS. The paper presents the perceptions of respondents on domestic violence as the causative agent of sluggishness on learning in Migwani Sub-county. The study is meant to better the learning process in the County.

Key words: Domestic Violence, Effect, Learning Process, High School Learners.

INTRODUCTION

Domestic violence is the wilful intimidation, physical assault, battery, sexual assault, and/or other abusive behaviour as part of a systematic pattern of power and control perpetrated by one intimate partner against another. It includes physical violence, sexual violence, psychological violence, and emotional abuse [1]. The frequency and severity of domestic violence can vary dramatically; however, the one constant component of domestic violence is one partner's consistent efforts to maintain power and control over the other.

Domestic violence is an epidemic affecting individuals in every community, regardless of age, economic status, sexual orientation, gender, race, religion, or nationality. Children in a household experiencing domestic violence become the hardest hit as it affects their participation in school, relationship with friends, their social behaviour and the learning process as a whole. Domestic Violence is often accompanied by emotionally abusive and controlling behaviour that is only a fraction of a systematic pattern of dominance and control. Abuse may begin with behaviours that may easily be dismissed or downplayed such as name-calling, threats, possessiveness, or distrust. Abusers may apologize profusely for their actions or try to convince the person they are abusing that they do these things out of love or care. However, violence and control always intensify over time by the abuser, despite the apologies. What may start out as something that was first believed to be harmless (wanting the victim to spend all their time only with them because they love them so much) escalates into extreme

control and abuse (threatening to kill or hurt the victim or others if they speak to family or friends). It is important to note that domestic violence does not always manifest as physical abuse. Emotional and psychological abuse can often be just as extreme as physical violence. Lack of physical violence does not mean the abuser is any less dangerous to the victim, nor does it mean the victim is any less trapped by the abuser.

Additionally, domestic violence does not always end when the victim escapes the abuser, tries to terminate the relationship, and/or seeks help. Often, it intensifies because the abuser feels a loss of control over the victim. Abusers frequently continue to stalk, harass, threaten, and try to control the victim after the victim escapes. In fact, the victim is often in more danger following the end of the relationship or when they seek help: A fifth of homicide victims with restraining orders are murdered within two days of obtaining the order; a third of the victims are murdered within the first month [2]. Victims of abuse are usually unfairly blamed because of the generalization that victims choose to stay in abusive relationships. The truth is, bringing an end to abuse is not a matter of the victim choosing to leave; it is a matter of the victim being able to safely escape their abuser, the abuser choosing to stop the abuse, or other agents (such as law enforcement courts) holding the abuser accountable for any abuse inflicted on the victim.

LITERATURE UNDERPINNING

Although domestic violence has been on the increase in many families and marriages in the world, some people feel that this problem is insignificant and given undeserving attention. Sexual and gender-based violence (SGBV) exists in all regions of the world and Kenya is no exception to this form of brutality which negatively affects women and children, in most cases. The Kenyan Government and the society recognize the importance of the family and the constitution of Kenya 2010 provides protection of women against violence and discrimination of all forms. In spite of the constitutional provision, domestic violence remains rampant in Kenya and one of the causes of many significant deaths in Kenya [3].

The state of education in Migwani Sub-county has been a matter that has raised eyebrows among stakeholders. The population of the learners in secondary schools has indicated a rising trend in the recent past. Over 40% of the population in secondary schools comprises of female students who are surviving poverty, domestic violence and early marriages that are detrimental in the education sector. The performance of the students from the year 2000 to the year 2015 has been declining compared to other sub-counties in Kitui County, with domestic violence being one of the reasons for the decline [4].

Problems Associated with Children Witnessing Domestic Violence

Children who witness violence between parents in their homes have become more visible in the spotlight of public attention. Out of 84 studies reporting on children witnessing domestic violence originally identified, 31 studies met criteria of rigorous research [1], with 18 of them comparing children who witnessed adult domestic violence to other groups of children, 12 others using multiple regression procedures to compare subjects along a continuum of violence exposure or by demographic characteristics, and one study applying qualitative research methods. The findings of these 31 studies can be divided into three major themes: (1) the childhood problems associated with witnessing domestic violence; (2) the moderating factors present in a child's life that appear to increase or decrease these problems; and (3) an evaluation of the research methods used in the studies reviewed. Reviewed studies report a series of childhood problems statistically associated with a child's witnessing domestic violence. These problems can be grouped into the three main categories presented in more

detail in the next subsection: (1) behavioural and emotional; (2) cognitive functioning and attitudes; and (3) longer-term.

Behavioural and Emotional Problems

Children's behavioural and emotional functioning is an area with probably the greatest amount of information on problems associated with witnessing violence. Generally, studies using the Child Behaviour Checklist [5] and similar measures have found child witnesses of domestic violence to exhibit more aggressive and antisocial ("externalized" behaviours) as well as fearful and inhibited behaviours ("internalized" behaviours), and to show lower social competence than other children. Children who witnessed violence were also found to show more anxiety, self-esteem, depression, anger, and temperament problems than children who did not witness violence at home. Children from homes where their mothers were being abused have shown less skill in understanding how others feel and examining situations from others' perspectives when compared to children from non-violent households. Peer relationships, autonomy, self-control, and overall competence were also reported significantly lower among boys who had experienced serious physical violence and been exposed to the use of weapons between adults living in their homes.

Overall, these studies indicate a consistent finding that child witnesses of domestic violence exhibit a host of behavioural and emotional problems. A few studies have reported findings with no differences on some of the measures, but these same studies found significant differences on other measures that include law enacting and civic education. Another aspect of the effects on children is their own use of violence. Social learning theory would suggest that children who witness violence may also learn to use it. Several researchers have attempted to look at this link between exposure to violence and subsequent use of it. Some support for this hypothesis has been found. For example, Singer, Miller, Guo, Slovak and Frierson [6] studied 2,245 children and teenagers and found that recent exposure to violence in the home was a significant factor in predicting a child's violent behaviour.

Cognitive Functioning and Attitudes

A number of studies have measured the association between cognitive development problems and witnessing domestic violence. While academic abilities were not found to differ between witnesses and other children [7], another study found increased violence exposure associated with lower cognitive functioning [8]. One of the most direct consequences of witnessing violence may be the attitudes a child develops concerning the use of violence and conflict resolution. Jaffe, Wilson and Wolf [9], suggest that children's exposure to adult domestic violence may generate attitudes justifying their own use of violence. Spaccarelli, Coatsworth and Bowden's [10] findings support this association by showing that adolescent boys incarcerated for violent crimes who had been exposed to family violence believed more than others that "acting aggressively enhances one's reputation or self-image" [10]. Believing that aggression would enhance their self-image significantly predicted violent offending. Boys and girls appear to differ in what they learn from these experiences. Carlson [11] found that boys who witnessed domestic abuse were significantly more likely to approve of violence than were girls who had also witnessed it.

Longer-term Problems

Most studies reviewed previously have examined child problems associated with recent witnessing of domestic violence. A number of studies have mentioned much longer-term problems reported retrospectively by adults or indicated in archival records. For example, Silvern's et al. [12] study of 550 undergraduate students found that witnessing violence as a child was associated with adult reports of depression, trauma-related symptoms and low self-

esteem among women and trauma-related symptoms alone among men. Witnessing violence appeared to be independent of the variance accounted for by the existence of parental alcohol abuse and divorce. In the same vein, Henning, Leitenberg, Coffey, Turner and Bennett [13] found that among 123 adult women who had witnessed domestic violence as children, greater distress and lower social adjustment existed when compared to 494 non-witnesses. These finding persisted even after accounting for the effects of witnessing parental verbal conflict, being abused as a child, and level of reported parental caring. Adolescents exposed to community and domestic violence appeared to cope better if they lived in more stable and socially connected households.

How Effects of Domestic Violence Affect Learning Process

DuRant, Cadenhead, Pendergrast, Slavens, and Linder [14a] assert that when children experience domestic and family violence, it can affect their emotions. Children often feel fearful, stressed, depressed, angry, anxious or ashamed. Emotional security is the foundation of healthy relationships later in life. This security can be damaged if attachment between the mother/carer and baby is disrupted by domestic violence. DuRant et al. [14a] assert that in adults, they can frame their problems in a funny story. But children in school do not have that luxury. Like adults, their own knowledge often flies out of their grasp when they are scared. Faced with frustration, despair, worry, sadness, or shame, kids lose access to their own memory, reasoning, and the capacity to make connections. The mere prospect of being asked to read aloud in class is enough to freeze some kids. Having to take a written test or exam, with its combined requirements for memory, reasoning, handwriting, planning and organization, can lock some kids' gears. The sight of a math word problem knocks some kids sideways. Scared kids perform poorly, and do not learn new information well. Anxiety is the enemy of memory. And, sadly, in many of today's classrooms, we see children whose intellectual energies and capacities are drained by negative emotional states. Emotion is the on/off switch for learning.

Children may not be able to concentrate at school because they are constantly on the lookout for danger. This can be subconscious. Detentions at school, missed school days and frequent changes of schools, which can emanate from domestic violence, also affect learning. Moreover, children may have low self-esteem, and think negatively about themselves or people around them. For example, they may think, 'everyone hates me'. A range of illnesses may be related to domestic and family violence. Headaches, stomach aches, stress reactions (for example rashes or immune system related illnesses) and sleep disturbances (for example nightmares, insomnia or bedwetting) are common.

METHODOLOGY

The study was guided by a descriptive design which according to Adèr, Mellenberg and Hand [15], saves time, expenses and the amount of quality information yielded is valid, while interviewer bias is reduced because participants complete identically worded self-reported measures. This study attempted to collect data from members of a population by asking individuals about their perceptions, attitudes, behaviours or values in order to describe an existing phenomenon [16].

Questionnaires and interviews as selected out of their merits [16] were the data collection instruments used. Respondents were chosen from 10 schools in 4 locations of Migwani sub-county with each school presenting 125 respondents. A sample of 56 respondents were then conveniently selected from the ten schools, i.e. two girls' and two boys' schools. This included students (30), teachers (12), principals (10) and parents (4). Data were analyzed using the SPSS (Statistical Package for Social Sciences).

The authors' intention for the study was that the study better the learning process in Migwani County. This paper thus presents the perceptions of respondents on domestic violence as a factor that influences learning in Migwani Sub-county.

RESULTS

The study obtained a hundred percent (100%) response. Data analysis was done by use of Statistical Package for Social sciences (SPSS), version 20. Out of the 30 students surveyed, 11 (36.7%) were male and 19 (63.3%) were female. Students of the age bracket between 15 to 20 years were considered for the study. The authors established the extent to which domestic violence affects high school learners in a family as victims of domestic violence. Focus was directed on children's daily activities including their school life. Individual perceptions and attitudes were therefore sought and findings are as presented in the following tables.

Table 1: Students' Views on the Impact of Domestic Violence

Opinion	Agree		Disagree	
	Frequency	Percent	Frequency	Percent
Injuries/Break up resulting from fights	11	36.7	19	63.3
Siblings' school dropout due to parent break ups	13	43.3	17	56.7
Lack of Concentration	3	10	27	90
Affects Students' Performance	29	96.7	1	3.3

N = 30

Source: Field data (2016)

Table 2: Teachers' Views on the Impact of Domestic Violence

Opinion	Agree		Disagree	
	Frequency	Percent	Frequency	Percent
Students affected in their performance	10	83.3	2	16.7
Poor performance	6	50.0	6	50.0
Family break ups	6	50.0	6	50.0
Slows learning	10	83.3	2	16.7

N = 12

Source: Field data (2016)

Table 3: Principals' Views on the Impact of Domestic Violence

Opinion	Agree		Disagree	
	Frequency	Percent	Frequency	Percent
Students affected in performance	10	100.0	-	-
Poor performance	4	40.0	6	60.0
Family break ups	6	60.0	4	40.0
It slows learning	9	90.0	1	10.0

N = 10

Source: Field data (2016)

Table 4: Parents' Views on the Impact of Domestic Violence

Opinion	Agree		Disagree	
	Frequency	Percent	Frequency	Percent
Drop outs because of violence	4	100.0	0	0
Affects education standards in family	4	100.0	0	0
Slows Learning	4	100	0	0

N = 4

Source: Field data (2016)

Table 1 indicates that out of a total of 30 students that took part in the study, 11 (36.7%) agreed that domestic violence brought injuries and family break ups. However, 63.3% of the

students disagreed. Pointing out to those who disagreed, it could be because they may not have witnessed such scenarios of family break ups and injuries or if they had witnessed, then the family suffers in silence with breaking up not being an option. More so, 13 (43.3%) of the students agreed that parents break ups affect them in terms of having their siblings' dropout of school while 56.7% disagreed. It was established from 10% of the students that when parents fight, there is no concentration in their studies, while the other 90% did not agree on the issue of less concentration due to parents' fights. A representation of 96.7% agreed that family fights affected their performance, while 3.3% objected to the point of family fights affecting their performance.

From table 2, 10 (83.3%) of the teachers agreed that domestic violence affected students in their performance while 2 (16.7%) objected. It is seen that 6 (50%) of the teachers mentioned poor performance as an impact of domestic violence to high school learners while another 6 (50%) mentioned family break ups as being the resultant effect of domestic violence. More so, more than half - 10 (83%) of the teachers agreed that domestic violence slows the learning process with 5 strongly agreeing and another 5 agreeing. However, 2 (16.7%) disagreed with this perception thus opined that domestic violence does not slow learning.

Table 3 presents the opinions of principals with 100% agreeing that domestic violence affects students' performance. Also, 40% of the interviewed principals agreed on poor performance as an impact of domestic violence while 60% disagreed saying there were other impacts, thus a 60% response in agreement that family break up is an impact of domestic violence that eventually affects learners in class. On if domestic violence slows learning, 90% of the respondents agreed that it does while 10% disagreed with the statement.

From table 4, all (100%) parents agreed that there are many school drop outs as a result of domestic violence. Dropping from school could be caused by family breakups or injuries sustained during physical abuse in the family. The parents agreed to the existence of school drop outs due to violence experienced in the families. All the parents (100%) agreed that domestic violence affected education standards in families. The education standards are affected especially when the students do not get conducive environment to carry out their study. Continuous absenteeism from school was also a concern for parents which they said was a result of injuries sustained by the learners. A half (50%) of the parents, agreed that domestic violence slows the learning process, as the other half (50%) strongly agreed on the same. Parents were, in an interview, asked of whom the victim of domestic violence is usually and 75% of them said that the father is usually the victim while 25% said it was the mother. This finding is contrary to the common belief that women are primary victims of domestic violence.

It was the authors' interest to establish how domestic violence was dealt with in various capacities by affected individuals. Of the 30 students interviewed, 12 (40%) of them said that their family issues are solved by in-laws, 8 (26.7%) of them said pastor/priest came in to intercede while the other 10 (33.3%) opined that clan elders play a role in solving domestic violence issues. Students were also asked whether their friends were aware of the fights that occurred in their families. At least 3 (10%) of the students agreed on the fact that their friends are aware of family fights while majority 27 (90%) disagreed. This could have been because the students preferred to keep the matters to themselves than to share it with friends. Prevalence of domestic violence in Migwani sub-county is at a high rate as evidenced by the large number (9) 75% of the teachers interviewed agreeing that students in school experienced domestic violence. Only 3 (25%) thought domestic violence was not experienced by their students.

Addressing Domestic Violence to Enhance Student Learning

Table 5 shows that 50% of the teachers agreed on approaching parents concerned and the other 50% had never approached parents concerned. A 16.7% on the other hand, had involved the children’s department concerning the situations, while 83.3% have never involved the children’s department.

Table 5: Teachers’ Perspective

Opinion	Frequency	Percent
<i>Ways in which teachers address Domestic Violence</i>		
Approached parents concerned	6	50.0
Involved children’s department	2	16.7
Addressed issues during parents’ meetings	7	58.3
<i>State has contributed to Combating Domestic Violence</i>		
Strongly disagree	1	8.3
Neutral	8	66.7
Agree	1	8.3
Strongly agree	2	16.7
<i>Civic Education plays a role to reduce Domestic Violence</i>		
Strongly disagree	3	25.0
Disagree	4	33.3
Neutral	2	16.7
Agree	3	25.0

N = 12.

Source: Field data (2016).

The authors sought to know what teachers thought the state has done to deal with domestic violence. As seen in Table 5, 1 (8.3%) of the teachers strongly disagreed that state law is doing enough to combat cases of domestic violence, 8 (66.7%) were neutral while another 1 (8.3%) agreed on the issue and the remaining 2 (16.7%) strongly agreed.

In addition, it is clear that 25% of the teachers strongly disagreed on civic education playing a role in combating domestic violence with 33.3% disagreeing, while 16.7% were not sure whether civic education has helped to combat domestic violence. Only 25% agreed that they have seen an immense contribution of civic education in combating domestic violence.

Table 6: Principals’ Perspective

Opinion	Frequency	Percent
<i>Ways in which domestic violence has been solved</i>		
Approached parents concerned	1	10.0
Involved children’s department	7	70.0
Address issues during parents’ meetings	1	10.0
<i>State has been Involved to Combat Domestic Violence</i>		
Strongly disagree	1	10.0
Disagree	8	80.0
Neutral	1	10.0
<i>Civic Education plays a role in combating domestic violence</i>		
Disagree	1	10.0
Neutral	8	80.0
Agree	1	10.0

N = 10

Source: Field data (2016)

All principals interviewed (100%) agreed on having students experiencing domestic violence. Only 10% of the principals had approached parents involved in domestic violence. While 90% had never approached the parents concerned, this had been made possible through raising such matters in parents' meeting. The result of majority not being involved could be because the parents failed to show up in the meetings whenever they were called upon. Thus, only a small percentage (10%) could be informed. It is also clear that 70% claimed to have involved the children's department when it came to matters of domestic violence while 30% did not.

At least 10% of the respondents strongly disagreed that the state laws are in anyway combating domestic violence while 80% of the respondents disagreed on the same. Therefore, it is clear that principals did not think the state was doing enough to deal with domestic violence cases. However, 10% of the Principals were neutral on the issue.

Concerning use of civic education, 10% of the principals disagreed on the fact that civic education is playing a role to combat domestic violence, 80% were not sure if the civic education has helped while 10% agreed that use of civic education helps solve domestic violence matters.

Table 7: Parents' Perspective

Opinion	Frequency	Percent
<i>Ways in which domestic violence has been solved</i>		
Witnessed domestic violence within neighbours	4	100
Involved Children's Department	2	50
<i>State plays a role in Combating Domestic Violence</i>		
Disagree	2	50.0
Agree	2	50.0
Disagree	1	25.0
Neutral	1	25.0
Agree	2	50.0

N = 4

Source: Field data (2016)

Table 7 indicates that all the four (100%) parents interviewed agreed that they had witnessed domestic violence in their neighbourhoods. Of the Parents, 50% tried involving children's department in solving domestic violence while the other 50% have never involved the children's department. Half (50%) of the parents agreed that the state law is doing enough to combat cases of domestic violence while the other 50% disagreed saying not enough has been done by the state law. Also, half (50%) of parents thought combating domestic violence had been made easier through civic education. However, 25% of them disagreed positing that civic education in the sub-county had not played a role in combating the domestic violence, while another 25% were not sure of what civic education has done in solving the problem.

DISCUSSION

Domestic violence results into dire consequences that affect students directly and indirectly. For example, confrontation on lack of basic needs could lead to insults being hurled, and in most cases, resulting into fights. Domestic violence thus has effects that include injuries and family break ups. However, most students are not aware of the injury and break up consequences since despite the fights, some families experiencing domestic violence still live together. This is contrary to literature and personal experience through which it has been made clear that when parents fight in a family, sometimes using crude weapons, they end up injuring each other. Some injuries could be so severe leading to hospitalization or even death.

Family breaks ups are also evident in most cases of domestic violence. This leads to divorce or separation of involved spouses. One of the spouses, in most cases usually the woman, is forced to leave the house due to continuous beating from the husband. Men are as well victims of domestic violence though few cases have been reported of men leaving their houses because of being beaten by the wife.

The responses from the students show how cases of domestic violence affected their academic performance. It was evident that performance and concentration in class was being affected by domestic violence experienced at home. Such circumstances resulted to some students missing out in school because they were injured as a result of the fights or even money meant for their school fees had been used for medication for an injured parent.

The teachers interact much with the students and for that matter can track well the performance of their affected students. Most teachers were of the view that domestic violence reduces students' performance and slows the learning process. This could be brought about by the physical injuries incurred by the students hence absenting themselves from school or even the failure to have a conducive environment to study while at home.

It is evident that family break ups resulted to some students dropping out of school because of a lack of school fees especially for a case where the father was the sole bread winner. When the parents separate, the mother leaves home with the children who are then left without any financial support. This leads to students dropping from school or slowing the learning process and eventually poor performance in school.

Most teachers did not seek help from the government. Many cases of domestic violence are not reported to relevant authorities. This can be attributed to lack of awareness among the victims or witnesses of domestic violence. It could also be because these individuals lack knowledge of their rights in society, thus do nothing to protect them. The failure to report could also be attributed to fear of victimization. Threats from abusers could make the victims suffer in silence.

Surprisingly, most teachers were not sure whether the state law is doing enough to combat cases of domestic violence. Since domestic violence is a crime that is punishable by law, the concerned state organs should be enhance their efforts of curbing domestic violence. Though there are cases which are reported to the police, there are those who find their way out of police custody. On the other hand, only a few teachers thought civic education is playing a role in combating domestic violence. Overall, majority of them said that civic education did not play a role in combating domestic violence. This could be because the people tasked with carrying out civic education do not do so. If civic education is not carried out then its impact on dealing with domestic violence will not be felt.

Most teachers did not address the issue of domestic violence during parents' meetings but only a few had discussed it in those forums. It is therefore evident that domestic violence is not much talked about and on how to deal with it. Whenever a domestic violence occurs, the family members shun talking about it to other people for fear of shame and ridicule. This can be attributed to one of the reasons that parents, teachers and school principals do not raise or discuss domestic violence cases.

Although the prevalence of domestic violence is clear in Migwani sub-county, Children's department is not fully involved in combating domestic violence. Despite admission by most parents to have witnessed domestic violence, only a few of them are reported, with the most

abusers being left unpunished. This has made victims in families experience suffering in silence. Given that parents' opinions on the role of civic education were divided, it is important to consider the role of the state. Thus, state officials and other stakeholders should engage more on civic education to help combat domestic violence. Through this, the public will also be more aware of steps to take in occurrences of domestic violence.

CONCLUSION

It is evident that students are reportedly witnesses of domestic violence in their homes and this affects their performance as well as slows down the learning processes. It is therefore imperative that teachers never underestimate the impact of domestic violence and should be empathetic with students who report suffering from domestic violence. Student whose performance dips due to domestic violence should be helped with counseling and academic coaching to mitigate against the negative effects of their situations on learning.

RECOMMENDATIONS

- i. The school principals should form strong guidance and counseling departments to help the students recover from the trauma of domestic violence.
- ii. The principals should sensitize the parents during parents' general meetings on matters of domestic violence.
- iii. The teachers should identify any dip in the performance of the students and discuss the cause with the students.
- iv. Strict laws should be enforced to deal with abusers in the society.

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Influence of Learning Management Systems on Teaching and Learning in Saudi Universities

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ABSTRACT

This paper investigated the impacts of Learning Management Systems (LMSs) on education in Saudi Universities, to ascertain the effectiveness of LMSs in this setting, and the challenges met during their implementation. Both qualitative and quantitative approaches were used to investigate the influence of LMS on teaching and learning in three universities in Saudi Arabia. The study adopted both questionnaires and interviews to collect data from 100 students and 101 lecturers in relation to their attitudes to LMS use at their respective institutions. The 201 participants were sampled from the three universities using a stratified random sampling method, where an almost equal proportion of students and teachers from the institutions were involved in the study. The results showed that proper use of LMS reduces time wastage among students and allows them to handle their professional and academic lives simultaneously. Meanwhile, lecturers receive training and learn how to operate the LMS systems for academic purposes, but at times find this a time-consuming process that requires more administration than teaching input. The outcome of this study is significant in expounding the positive as well as negative impacts of LMSs on education in higher learning. More so, it brings into the fore the need for university administrations to consider adopting such a system as a contemporary approach in learning and teaching in the universities to enhance the learning process. The results may also form a basis upon which policymakers in the educational sector may formulate sound policies to enhance and promote quality education in Saudi Arabian universities.

Key words: LMS, Saudi Arabian Universities, learning and teaching, time management, learning technology, technological challenges, technology adoption challenges.

INTRODUCTION

The best way to study without being physically present in class is via a Learning Management System (LMS), such as Blackboard or Sakai, and the advent of LMS technology in the late 1990s enabled both teachers and students to pursue education in a more convenient manner in contemporary society. LMSs allow teachers to check students' progress, administer examinations, and provide grades according to students' performance level. Young people, meanwhile, prefer to study via LMS because they were born into the generation that embraces such technology use. Thus, this study reveals the influence that LMS technology has on learning and teaching, particularly in Saudi Arabian Universities. It also identifies the barriers and challenges that occur when adopting this learning technique.

Background and Theoretical Framework

LMS technology is vital for training people not only within the school set-up but also in the business environment (Dias and Diniz, 2014). The positive aspect of using such software in this line of learning includes its ability to handle both simple and complex data. Additionally, the software has been merged with various digital frameworks, thus making it possible to manage

the curriculum, evaluation tools, and training materials that are necessary in any programme of learning (Dahlstrom and Bichsel, 2016). According to Sharifah, et al. (2013), LMSs allow individuals to manage and distribute teaching materials to the target students with a great deal of ease. In this respect, LMSs provide lecturers in various universities across the globe with the opportunity to inculcate effective teaching and learning methods while discharging their academic mandates in higher education (Limongelli, et al., 2016). The advent of the Internet and social media has facilitated the process of learning in addition to interaction and communication among the global populace (Conde, et al., 2014). Studies also show that students have not only embraced the use of LMSs in university education, but have also taken advantage of the proliferation of information on the Internet to enjoy the fruits of technology.

Amongst the functions provided by LMSs are provisions for discussion and bulletin boards. Just as in a traditional classroom set-up, learners are at liberty to engage in discussion; however, unlike in the classroom, on LMSs, the threaded discussions are available at any given time and students can join these discussions to seek help from their fellow students (Persico, Manca, and Pozzi, 2014). Moreover, since most learners have access to vast online contents, the information they share on discussion boards is relatively rich in knowledge (Dias and Diniz, 2014).

While studies on the embracing and subsequent use of LMSs exist across the globe, Alharbi, Saleh, and Drew (2014) note that the extant literature on the use of such systems is shallow in the context of Saudi Arabian third-level education. Of more importance to note is that different lecturers as well as departments often present different views and perceptions in relation to the adoption of LMSs in the university curriculum (Wamda, 2017). While, as mentioned above, LMSs have improved the learning process in many schools worldwide, their impact on Saudi Arabian universities remains contentious as few studies are available. The advent of the Internet and social media has further necessitated the effective use of LMSs worldwide, and the Saudi Arabian educational system should be no exception. In this respect, this study sought to prove the effectiveness of LMSs in the Saudi Arabian university educational system and thus to fill the existing literature gap by providing relevant and reliable information on LMS usage in the Saudi educational context. Notably, while LMSs have been used in several universities in Saudi Arabia, their efficiency not only across departments but also across institutions remains unexplored.

The business world, particularly business companies, also utilizes the knowledge of LMSs to train its staff. During certain times, management may find it difficult to reach out to all stakeholders and train them using face-to-face communication, while a company that has a large and scattered workforce finds it difficult to train employees because they cannot all be present at the same time. In such instances, the organizations rely on their best alternative for training purposes, for instance, LMSs. Many companies have realised the benefits of such training methods, while the eLearning system is also gaining momentum in the academic sector, specifically in higher learning institutions. There is commendable proliferation of technology across the global society, and the education sector is still struggling to cope with this technological change (Anderson, 2016).

For instance, the introduction and widespread use of the Internet among youth worldwide has become useful in terms of the effective implementation and realization of the goals and objectives of LMSs. Facebook came out as a popular social networking site. Like many other new technologies, Facebook provided an opportunity for teaching and learning based on its unique built-in functions offering pedagogical, technological, and social affordances. For example, it is possible to use Facebook group as a type of learning management system in

pursuing specific goals and objectives. According to Gautreau (2011), students can take advantage of their online presence to learn using LMS programs comprehensively. Poon, et al. (2017) reiterates that the advent and proliferation of social networking sites have facilitated the effective integration of LMS programs into university curricula across the globe.

According to Dias, Diniz and Hadjileontiadis (2013), LMS programmes provide an avenue for students to enforce their multi-sensory and multi-modal experiences during the learning process and engage in research trials, particularly the use of LMS in the university curriculum. As a result, LMSs aid in enhancing competence among students in those universities that have embraced them (Dias, Diniz and Hadjileontiadis, 2013).

However, Pappas (2017) argues that LMSs are not devoid of challenges, particularly in relation to factors that must be considered before implementing them in university education. In this respect, Pappas mentions such factors as specification support, pricing models, as well as customer support as some of the issues that affect the adoption and subsequent effective implementation of an LMS (Pappas, 2017). An effective LMS should harmonize the training of employees in a corporate sector with knowledge management.

Several academic institutions have made use of LMSs for the benefit of learners, with many schools developing an eLearning section in response to the demands of those students who cannot make it to the classroom. According to Dias and Diniz (2014), the future of education is bright with LMS because technology is controlling the world. Different schools, particularly universities, are moving to a paperless learning program due to the influence of LMSs. The results of this research will be among the means that can be used to identify whether or not LMS use is essential in universities, especially those in Saudi Arabia.

Research Questions

This research aims to answer the following questions:

- How effective is learning management in Saudi Arabian universities?
- What are the challenges faced while implementing LMSs in Saudi Arabian universities?
- How can these challenges be overcome?

RESEARCH METHODOLOGY

This study was conducted in three Saudi Arabian Universities, including Umm-al-Qura University, King Faisal University, and King Saud University. The universities had enrolments of over 45,000 students, 33,691 students, and 55,000 students, respectively, as of 2015. Business, health sciences, and education departments were chosen for research due to the variances in their enrolment rates. Notably, business had the highest number of students, while education had the least. Health science was chosen to ensure representativeness of the study.

Type of Research

In this study, both qualitative and quantitative data were collected to make it possible to understand the impact that LMSs have had on learning in Saudi universities. The qualitative research entailed analysis of the results of LMS programs, the challenges that the system faces, and the manner in which those problems can be fixed. The quantitative nature of the research made it possible to analyse the statistical data and draw relevant conclusions (Fowler, 2013).

Sampling Method

A simple random sampling method was used to collect data. I engaged a member of university management staff in each of the three universities to access the student fraternity, where I received a list of students, with a focus on those in e-learning programmes. The students

sampled for the study ranged in age from 18 to 24 years. I then utilized a simple random sampling method to select individuals, and conducted interviews and questionnaires to obtain data. I also obtained a list of university staff members. I had limited interest in the administrative staff, and so the focus was on teaching staff, particularly those who delivered online learning. While the age range of students was relatively narrow, the lecturers sampled for the study had a relatively wide age range; notably, between 38 and 54 years. The two lists were compiled, and the study sample was then selected at random.

Respondents

As stated, the primary sample comprised lecturers, especially those engaged in teaching via eLearning portals, and students in business, education, and health sciences departments. These two groups were considered to have first-hand information on the survey topic. It is also worth noting that the universities involved in the study had adopted various LMSs, including Blackboard, WebCT, Online Learning, Moodle, and Nicene among others that are of great interest to this study. The lecturers and students came, in equal proportions, from all three departments in the three universities and most importantly, since LMSs were used for teaching purposes, the participants were deemed suitable for the study. The sample population comprised 201 individuals--100 students and 101 lecturers. The random sampling of 101 lecturers of possible 350 and 100 students of a possible 600 in the three departments within the three universities ensured that the data gleaned would represent the entire population of teachers and students. This sampling method also ensured that the information obtained was not only representative but also devoid of any bias. The table below presents information on the number of students sampled from each of the three departments, comprising the business, education, and health sciences departments in the three universities. An almost equal number of males and females were intentionally sampled to ensure gender balance.

Table 1: Number of Students Sampled for the Study from Each Department

University 1						University 2						University 3					
Business Dept.		Education Dept.		Health Sciences Dept.		Business Dept.		Education Dept.		Health Sciences Dept.		Business Dept.		Education Dept.		Health Sciences Dept.	
male	female	male	female	male	female	male	female	male	female	male	female	male	female	male	female	male	female
6	5	6	5	5	6	6	6	7	4	6	5	5	5	6	5	6	6

Data Collection Methods

A diverse range of data collection designs were employed for use in the study. One of the most instrumental methods was the administration of open-ended questionnaires, with yes or no answers required and a small explanation as shown in Table 2. The students did not face any difficulties in completing the questionnaires as the questions were relatively direct (Burns, 2000). Moreover, the questionnaires did not require much time to complete. In addition, there is a need to carry out a pilot study to ascertain the validity of the survey. According to Sekaran and Bougie (2016), questionnaires are not only an economical method of data collection but can also reach many participants during the data collection process. Furthermore, questionnaires provide quantifiable responses that are relatively easy to scrutinize (Sekaran and Bougie, 2016).

The other method used to collect qualitative data was interviewing. Participants were asked general questions about the influence of LMS programs on the learning and teaching process in their universities. For instance, I sought to ascertain students' awareness of the existence of the software and their level of experience with its application in their respective curricula. I also

attempted to establish students' perceptions of the software, including their views on its adverse and beneficial aspects, if any. I ensured the validity of the interviews through various means, including conducting a pilot interview, desisting from asking leading questions, taking notes during the interview, as well as allowing the interviewees ample time to explain and express their opinions, provide clarity, as well as summarise the main points. The participants were asked about their personal feelings on these matters, and, unlike the questionnaires, the interview data were detailed. Therefore, a proper analysis of the findings was later conducted and appropriate conclusions generated. The interviews lasted approximately 90 minutes, giving a lot of time to engage the participants from the universities.

The data obtained from the study through the administration of questionnaires as well as the responses from participants from the interviews were stored securely.

The interview questions included the following:

1. What are the advantages associated with the use of an LMS for study purposes in your university?
2. What is your opinion on the way in which learning is controlled in the different eLearning Portals?
3. What are some of the challenges that you have encountered when using the program (as a student or lecturer)?
4. What is your opinion on the causes of these challenges?
5. How do you think the problems can best be fixed?
6. Kindly make any final statement before we close the session.

Table 2: Research Questionnaire on the Influence of LMSs in Saudi Universities

Academic Level: _____ Course: _____ Age: _____

Instruction:

Please check (√) and rate how you feel based on the below statements on eLearning

1. The LMS learning program enables students to manage time more efficiently compared to classroom studying.

Strongly Disagree	Disagree	Agree	Strongly Agree
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2. Students can engage in other activities in the LMS program compared to the classroom studying environment.

Strongly Disagree	Disagree	Agree	Strongly Agree
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3. Most post-graduate students use the LMS.

Strongly Disagree	Disagree	Agree	Strongly Agree
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4. Students on the eLearning program perform better than those in the classroom set-up.

Strongly Disagree	Disagree	Agree	Strongly Agree
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5. Classroom studying should be eliminated and learning rolled back to LMS only.

Strongly Disagree	Disagree	Agree	Strongly Agree
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6. Traditional hands-on courses can be studied through LMS.

Strongly Disagree	Disagree	Agree	Strongly Agree
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Ethical Guidelines for Data Collection

Informed consent to conduct the study was obtained from the relevant university authorities. Additionally, all participants provided informed consent to participate in the research.

RESULTS

The questionnaire responses showed that most students in the participating universities, particularly those taking postgraduate programs, opted to use eLearning, at a percentage of 67%. A larger percentage chose to take their exams online without attending classes physically (71%). A higher percentage (54%) of students stated that they performed better when they studied and took examinations online than when they were present for the whole semester and attended classes in person. On the other hand, 46% argued that they were more likely to pass exams while studying in the classroom than online. I utilized the Statistical Package for the Social Sciences (SPSS) (2015) to analyse the data after the collection process. In this paper, I utilized SPSS to analyse the descriptive statistics, particularly the responses provided by students on the influence of LMS on their studies. For instance, the perceptions of students and their percentages, as well as the lecturers both in favour and against LMSs were included in the descriptive analysis using SPSS. Figure 1 below provides detailed information on students' perceptions of LMSs in their universities. Figure 2 provides details of lecturers' perceptions of the use and influence of LMSs in their universities. Forty-five percent of the lecturers believed that classes should be scrapped entirely and students allowed to study through the various online sites. Most professors (55%) also stated that checking learners' progresses easier through LMSs than through papers, which are given in the classroom set-up.

Figure 1: Students' Perceptions of LMS Use in Saudi Universities

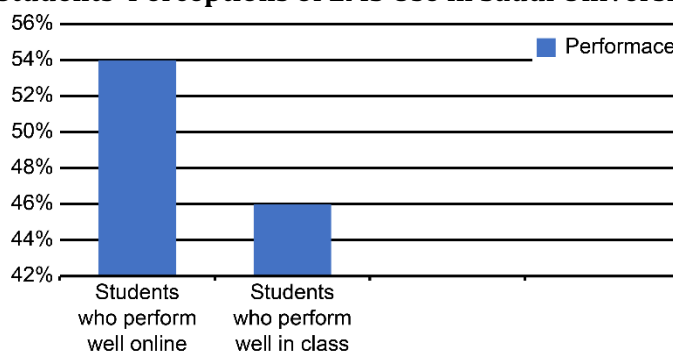
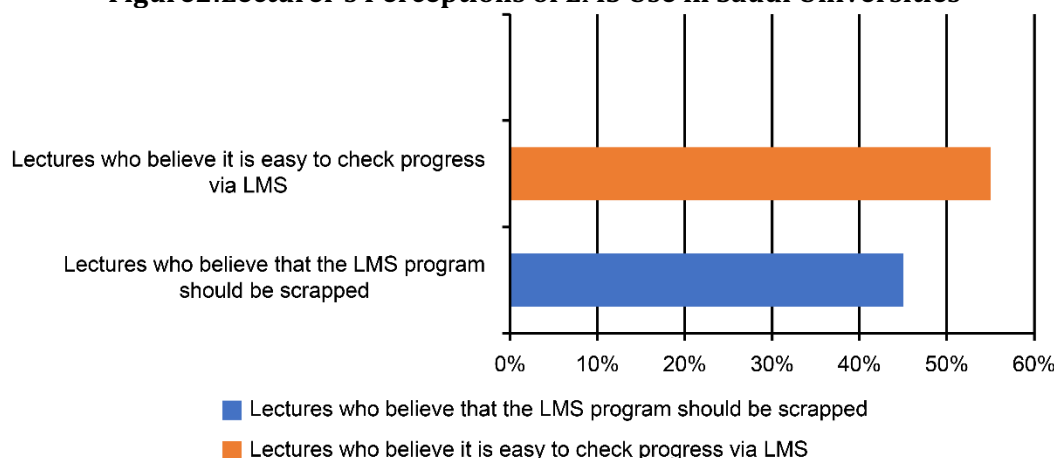


Figure 2: Lecturer's Perceptions of LMS Use in Saudi Universities



The majority of students taking traditional hands-on courses said that the complete abolition of classes would negatively affect their learning, as they cannot discharge their duties without

engaging in practical approaches. Students from various departments responded differently to the introduction of LMSs. For instance, 81% of students from the business department embraced the integration of LMSs into the university education system, 40% of students from the education department did so, and 60% of health science students advocated the incorporation of technology into their learning process (Figure 3). It is worth noting that all lecturers from the business department embraced the integration of LMSs into Saudi university education, citing its effectiveness at training business students. Although lecturers from other departments also welcomed the technology, they did not appreciate it to the extent that their business counterparts did. For instance, 60% of the education lecturers embraced the system, while 65% of health science lecturers welcomed its integration in Saudi university education (Figure 4).

Figure 3: Percentage of Students Who Support LMS

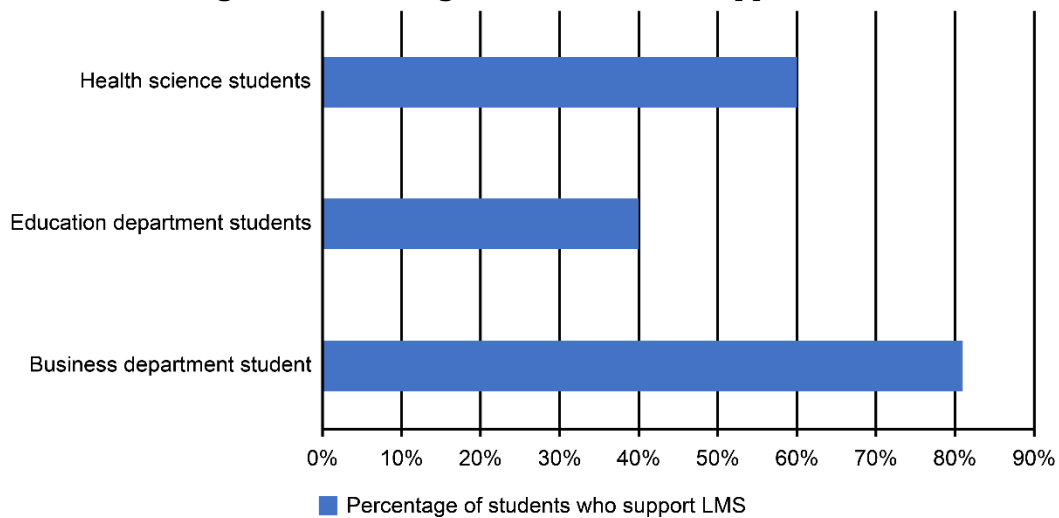
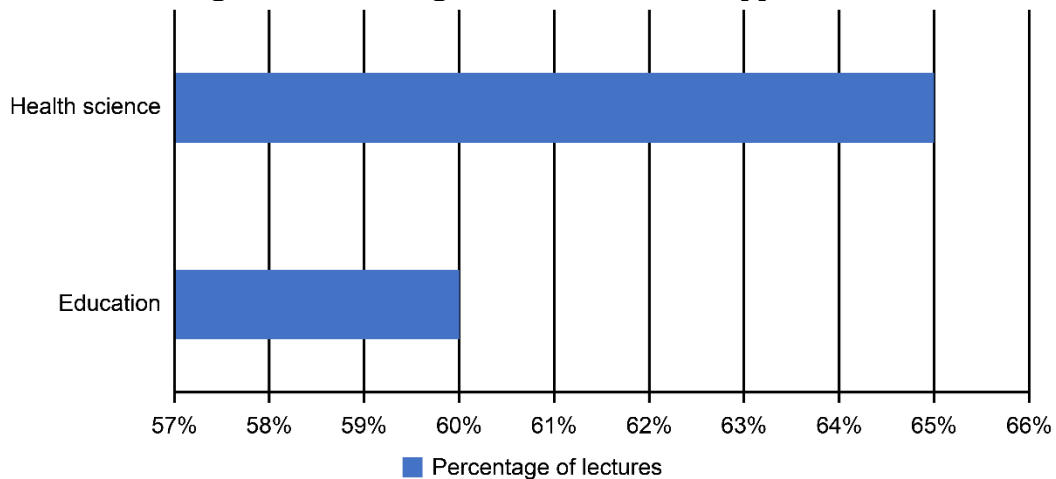


Figure 4: Percentage of Lecturers Who Support LMS



DISCUSSION

Based on the information obtained from the study sample, many students and lecturers in Saudi universities like LMSs. However, it is imperative to examine the influence of LMSs on the education sector, particularly university education. LMSs have a number of advantages, which is why the students in Saudi Arabian universities have been able to embrace them.

One of the benefits for students is that they can attend classes wherever they are, as well as taking examinations from those locations. Students are different; there are those who work

part time to raise their school fees and those who must take care of their families. On the other hand, some students are entirely dependent on their parents, and as such are relatively carefree. Each of these three categories of student has distinct priorities, which are difficult to meet simultaneously.

For example, a student who is struggling to raise his or her school fees may not have sufficient time to spend in the classroom for the whole day as opposed to those students who are dependent on their parents. The only system that will allow all three groups of students to manage their studies is LMS-type learning. The sample population stated that LMSs allowed them to take classes wherever they are and with a great deal of ease. One student spoke of the difficulty he faced while attending classes, and raising the school fees by himself. His life was quite hectic, and at times, he had to miss out on most classes to earn a little cash for upkeep and school fees. Amid these challenges, he stated that he is currently enjoying the benefits of the introduction of the LMS system at the university. The benefits attributed to LMSs in college education across the globe are enormous, and Saudi university education is no exception.

The other influence of LMSs is the presence of a large variety of learning materials within the different online portals. In a classroom set-up, some lecturers do not even provide notes. Thus, in Saudi universities, students have difficulty accessing information, and some even give up. This issue replicates similar findings in other universities worldwide (Pappas, 2017).

Another advantage cited by the students was the reduction of learning and development costs. The advantages of LMS mentioned above emphasise the beneficial aspects of LMS in university education. Not all the students live in the vicinity of the college. Thus, in order for them to have 100% class attendance, students must rent hostels, arrange and pay for their own travel costs, and use extra cash to print the learning materials. The introduction of LMSs has enabled them to reduce some of these unnecessary costs. Because they conduct most of their learning and examinations through online platforms, they are able to take exams wherever they are. Additionally, most of the learning materials are available online; thus, students do not have to spend money printing the hard copies of assignments or lecture notes. The students also discussed the reduced study time as an advantage of LMSs in Saudi Universities. A student who commutes to school on a daily basis wastes a great deal of time if he or she is expected to be physically present in class. A student may have three classes, one in the morning, one at midday, and one in the evening. Such a student must remain in school until these classes are over, thus making it relatively difficult to engage in other activities that can generate income. However, the interviewed students stated that, as a result of LMSs, they had reduced their learning and development time, as the duration of online training is short as compared to classwork. The content to be delivered is also well organized so that students can understand it more quickly. Moreover, once the session ends, the student has time to engage in other constructive activities, while waiting for the next session. LMSs save on time because the learners simply click on the modules and absorb the information therein.

The integration of the social learning experience is another impact identified by the students. Through LMSs, students are better placed to quickly access social media, as evidenced in the responses collected in this study. This corroborates the findings of many other relevant studies conducted worldwide, including Pappas' (2017) study on LMS use and effectiveness. This accords the individual an opportunity to access social media platforms, including Twitter, LinkedIn, and Facebook links as well as to interact with their friends through the online platforms (Limongelli, et al., 2016). The sample population that were interviewed said that they interact and socialize on different platforms. It must be noted, however, that students not only attend school to gain skills relevant to the job market; socializing is the primary reason

behind networking. Thus, because the students are not in classrooms, they may not have opportunities to get to know each other better.

Students in the classroom set-up also tend to lack self-responsibility, an issue that is not limited to Saudi Arabian universities. In this study, for instance, learners were often subject to peer influence. They only complete assignments in the company of their classmates and when those assignments are almost due. However, this was not the case for graduates studying through LMS programs. As they operate on their own, they learn to manage their time effectively and allocate sufficient time to their studies. Through LMSs, the lecturers noted that most students have managed to increase their self-confidence, particularly when pursuing studies virtually. In this aspect, students use the platforms to approach experiences with the desired creativity and attempt to solve various problems on their own, resulting in a substantive increase or boost in the self-confidence.

Most students stated that they benefit greatly from the online group talks. Despite the myriad of advantages cited by the students; however, the online system of learning also presented a fair share of challenges. One of the biggest problems cited by the lecturers was their managerial role in the system. Ideally, students are supposed to learn and not manage. The lecturers felt that they had to operate the system and the students. They stated that the system works best in the business sector, particularly when it comes to training employees in different tasks. Other departments like health sciences and education also embraced the system, although at lower percentages as stipulated in the findings of this study. As noted earlier in this paper, more business students embraced the technology compared to their counterparts in education and health sciences. The software has not been developed in such a way that the students can study to the expected level. Ideally, students should attain 20% of information from their teachers and the remaining 80% autonomously, in order to pass their examinations. However, the LMS is quite the opposite, with teachers expected to provide more than the student should research. Some of the teachers interviewed stated that the students expect them to provide all the modules in a particular course. There is limited effort by the students; hence, their level of academic performance was lower than when they were in the classrooms.

Another challenge cited by both students and teachers was the difficulty in changing from one LMS to another. New management systems are frequently introduced and institutions have to try out the latest system to help students pursue their studies more effectively. Most students and teachers have a problem with the shift from one LMS to another, although their reactions in this respect are mixed; some argue that the new system is more complicated than the previous one, thus meaning that the institution wastes more time shifting back to the previous system of study. Additionally, when such a change takes place, the teachers have to be trained to allow them to discharge their duties appropriately, and universities must therefore incur further training costs. Notably, in creating these learning systems, the developers often make mistakes of omission; thus, the difficulty in having a complete learning system.

Challenges in Adopting LMS Technology

There have been enormous challenges in adopting LMS or shifting from the traditional to LMS-based learning and teaching approaches. The old and new LMSs are overbuilt, and learning has been locked into what is termed a complex suite with distinct features. Operating such systems becomes quite hectic for both administrators and teachers (Kats, 2013). Even if they figure out how to operate the system, adapting to them takes a great deal of time. The developers have not simplified these systems to allow teachers to operate them with great ease. Some students also mentioned that a day of learning could be lost when technical errors prevent them from accessing their online portals.

Another challenge cited by the students was the difficulty of handling just some of their courses through the online platforms (Limongelli, et al., 2016). Certain courses demand a practical presence in the classroom. Some such courses mentioned by students included those that require a practical approach, such as science-related courses. Students taking healthcare courses are expected to learn the theoretical concepts and combine them with practical aspects. These practical aspects can only be learned in the classroom with a teacher (Limongelli, et al., 2016). Additionally, traditional courses, especially hands-on courses, are difficult to simulate in online classes. Students stated that they cannot take courses away from the classroom entirely; at some point, they must be present for practical lectures.

Unlike the traditional learning system, the use of LMS may pose challenges to the students. A sizable number of students complained about unclear instructions and that they cannot promptly access the teachers to make clarifications. In the classroom set-up, the teacher is present to answer questions when a student does not understand a concept. However, this provision is not available to students who take their courses through LMSs (Kats, 2013). These findings concur with the findings of Kats (2013), who placed much emphasis on the need to follow instructions as an important aspect of the learning process. According to the students, the process of overcoming challenges depends on improvements in the LMS, which will enable the learning process to be run more effectively. Moreover, lecturers should stop performing managerial tasks and instead engage in teaching. The students stated that there is a need to train some of the lecturers in using the LMS. Most lecturers cannot teach them because they are not conversant with how to offer online courses. Additionally, the students had a general feeling that the number of lecturers teaching them through online learning should be increased to increase accessibility.

CONCLUSION

Studying has been made possible at any time and any place, because the Internet has facilitated the connection between teacher and student. According to this study in Saudi Arabian universities, a large number of students join online learning programs due to their implicit advantages. The research indicates that most postgraduate students conduct their studies online, as they need to balance their education with their professional life; this depicts the effectiveness with which the Saudi Universities have embraced LMS. However, there are challenges involved in the integration of LMS in the Saudi Universities. For instance, more undergraduate students come to the classroom to study, partly due to their desire to socialize. Young individuals, particularly in their late teens and early twenties, feel that they have to be physically present in class to mingle and associate with their peers. Nevertheless, the advantages of LMSs identified by the sample population carry more weight. Although the system is not fully developed to support training, especially in the academic sector, benefits have been observed, and there is hope that improvements will be made to reduce the few remaining hitches for students and administrators. The study was limited to only three universities in Saudi Arabia, which may not be representative enough to reflect the true picture in all the universities in the country. Therefore, there is a need to pursue further research to ascertain the effectiveness of the systems as well as the challenges existing in other universities within the country. It is also imperative that other nations in the world consider incorporating LMSs into their learning institutions.

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Spirituality And Healing: Perceptions And Implications On The Akan Of Ghana

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ABSTRACT

Spirituality, over the years, has become an important concept, though complex. It has served as a means to providing meaning to life through feelings of hope and faith, as well as capable of promoting the well-being of the individual. Healing, on the other hand, implies a complete state of well-being. The paper assesses the perceptions and impact of the relationship between spirituality and healing on the Akan as a people. Using the mixed method approach, the study gives an extensive interpretation of the effects and influence of spirituality and healing on the Akan. It re-introduces the significance of spiritual systems on health and healing, and provides more information on better ways to holistically care for the sick. It suggests a constant observation and recognition of the dimensions of spirituality when considering population health.

Keywords: Spirituality, Healing, Population health, disease, cure, Akan.

INTRODUCTION

In recent times, the interplay and effects of spirituality and healing have been a topical issue. The study of the connection between spirituality and healing, according to Koenig¹, has a long history particularly among ancient civilizations. Though the aspects that made spirituality and healing great allies are very old², many recent studies consistently suggest a broad protective relationship between spirituality (religious participation) and population health³. The effects of the relationship between spirituality and health, Paris⁴ observes, are enormous to health development and religious growth. Over the years, physicians and other healers have witnessed how illness focusses attention on “ultimate meaning, purpose and transcendence, and ...relationship to the significant and sacred”.⁵ However, some modern day healthcare givers constantly overlook dimensions of spirituality when considering health of patients.⁶

¹ Harold G. Koenig, *Medicine, Religion and Health: Where Science and Spirituality Meet* (2008).

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³ T. J. Vander Weele, T. A. Balboni and H. K. Koh, ‘Health and Spirituality’. *Journal of American Medical Association*, 1: 2017, 1-2.

⁴ Peter J. Paris, *The Spirituality of African People: The Search for a Common Moral Discourse*. (Minneapolis: Fortress Press, 1995).

⁵ O. M. Pulchalski, R. Vitillo, S. K. Hull and N. Reller, ‘Improving the Spiritual Dimension of Whole Person Care: Reaching National and International Consensus’. *Journal of Palliative Medicine*, 17(6): 2014, 642-656.

⁶ J. K. Opoku, *Spirituality and Healing: Impacts on the Akan of Ghana*. (Maastricht: Shaker Publishing, 2016), 24.

In spite of the evidence associated with spirituality and illness particularly in traditional healing and in modern healthcare (seen in traditional healthcare systems and chaplain involvement with improved patient satisfaction), formal system of collaboration between spirituality and health remain restricted and inadequate. This has often been attributed to the shift to scientific treatment as well as high patient-physician ratio in many developing countries. The accessibility of healthcare in Ghana, for instance, is illustrated by the ratio of 1:20,000 and 1:200 for biomedical care and traditional healthcare respectively⁷. This leaves physicians and healers with little or no time to assess the spiritual connections with patient's illness. Meanwhile, some systematic population-based studies have shown that spirituality and religious involvement are generally associated with negative outcomes (especially in physical and mental health).⁸

Spirituality has almost been regarded as a new concept, with a lack of recognition amongst some authors of the historical and traditional association between spirituality, religion and health.⁹ Described as the search for the sacred¹⁰, the element of spirituality is the most central function of religion.¹¹ The idea of the sacred is what distinguishes spirituality from other phenomena.¹² It is a complex, but important concept. Its importance, according to Weathers, is realized in the increase quest for the inclusion of spirituality and spiritual care in healthcare policy across the world¹³ as contained in various research works on spirituality. According to Koenig et al¹⁴, the term spirituality refers to the individual search for "understanding answers to ultimate questions about life, meaning and relationship to the sacred or transcendent, which may (or may not) lead to or arise from the development of religious rituals and formation of community". Spirituality encompasses the existential domain and the essence of what being human is, providing meaning to life through feelings of hope and faith, capable of promoting the well-being of individuals.¹⁵ For instance, among the aged, Reis and Menezes explains that, spirituality is an incentive for facing challenging situations and difficulties in the last years of their life. It serves as resilient strategy and reveals surprising influence on the better quality of life of the older adult.¹⁶

In Ghana, the growing interest in spirituality has stemmed from the changes in religion and society as well as their increasing influence on culture. There seems to be a shift from collective search for spirituality to a more personal one (i.e. a personal search for meaning, well-being

⁷ M. Tabi, M. Powell, and D. Hodnicki, 'Use of traditional healers and modern medicine in Ghana'. *International Nursing Review*, 53(1): 2006, 52-58.

⁸ Paul S. Mueller, David J. Plevak and Teresa A. Rummans, 'Religious Involvement, Spirituality, and Medicine: Implications for Clinical Practice'. *Mayo Foundation for Medical Education and Research*, 76: 2001, 1230.

⁹ E. Weathers, Spirituality and health: A Middle East perspective. *Religions*, 9(33): 2018, 1-17.

¹⁰ P. C. Hill and K. I. Pargament, 'Advances in the Conceptualization and Measurement of Religion and Spirituality'. *American Psychologist*, 58: 2003, 44-65.

¹¹ A. Ephirim-Donkor, *African Religion Defined: A Systematic Study of Ancestor Worship among the Akan*. (University Press of America, 2012).

¹² P. C. Hill and K. I. Pargament, 'Advances in the Conceptualization and Measurement of Religion and Spirituality'. *American Psychologist*, 58: 2003, 44-65.

¹³ E. Weathers, 'Spirituality and Health: A Middle East Perspective'. *Religions*, 9(33): 2018, 1-17.

¹⁴ H.G. Koenig, M. E. McCoullough and D. B. Larson, *Handbook of Religion and Health* (1st Ed). (New York: Oxford University Press, 2001), 18.

¹⁵ A. L. C. B. de Oliveira, C. D. A. Feitosa, A. G. dos Santos, L. A. de A. Lima, M. A. Fernandes and C. F. de S. Monteiro, 'Spirituality and Religiosity in the Context of Drug Abuse'. *Revista Da Rede de Enfermagem Do Nordeste*, 18(2): 2017, 283-290.

¹⁶ L.A. Reis and T.M.O. Menezes, 'Religiosity and Spirituality as Resilience Strategies Among Long-Living Older Adults in Their Daily Lives'. *Revista, Brasileira De Enfermagem*, 70(4): 2017, 761-766.

and power). This has necessitated an increased emphasis on spirituality across many fields including business, governance and healthcare.

Bircher¹⁷ defines health as “a dynamic state of well-being characterized by a physical, mental and social potential, which satisfies the demands of a life commensurate with age, culture, and personal responsibility”. He adds that if the potential is insufficient to satisfy these demands the state is disease. The constitution of the World Health Organization (WHO) clarifies health as a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity¹⁸. In this definition is an emphasis on the indigenous Ghanaian notion of disease and cure. The traditional Ghanaian and for that matter Akan medical theory views disease in the light of spiritual and social causation. However, as a result of contemporary social changes, namely, western education and religion, there has been a call for the development of a medical model which will articulate the medical needs for recipient societies.

The concept of healing remains confusing and inexact.¹⁹ According to Egnew, the confusion concerning healing is evidenced by the lack of consensus about its meaning.²⁰ Literally, healing means to make whole.²¹ It is from the root of the old English word ‘*haelan*’, the condition or state of being ‘*hal*’ -whole. ‘*Hal*’ is also the root of ‘*holy*’ -defined as ‘spiritually pure’.²² So, themes of wholeness, narrative²³ and spirituality are congruent with the derivation of the term ‘healing’. Dossey et al, therefore, define healing as “the process of bringing together aspects of one’s self, body-mind-spirit, at deeper levels of inner knowing, leading toward integration and balance with each aspect having equal importance and value.”²⁴ It represents a complete state of well-being. In its holistic sense, the concept of healing has faded from medical attention and is rarely discussed in medical literature.

The paper is meant to assess perceptions and existing implications of the relationship among spirituality, health and healing on the Akan as a people. The setting for this research is the Akan community in the Ashanti region of Ghana. In that sense, the study is not extended to cover other Ghanaian Akan communities in different regions.

METHODOLOGY

The study involved the use of mixed method and relied on primary and secondary data sources. It adopted these procedures in collecting data and information on the implications of spirituality, health and healing. The secondary source of data collection involved published and unpublished documents such as books, articles, reports, conference papers, online materials

¹⁷ Johannes Bircher, ‘Towards a Dynamic Definition of Health and Disease’. *Medicine Health Care and Philosophy*, 8(3): 2005, 336.

¹⁸ Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22nd July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p.100) and entered into force on 7th April, 1948.

¹⁹ J. K. Opoku, *Spirituality and Healing: Impacts on the Akan of Ghana*. (Maastricht: Shaker Publishing, 2016), 65.

²⁰ Thomas R. Egnew, ‘The Meaning of Healing: Transcending Suffering’. *Annals of Family Medicine*, 3(3): 2005, 255-262.

²¹ Oxford English Dictionary. (Oxford, 2012).

²² Webster’s New Collegiate Dictionary. (Springfield: G & C Merriam Company, 1979).

²³ Narrative (therapy) provides a form of healing different from that of medicine and spirituality. It is a form of counseling that views people as separate from their problems. It ensures healing by admonishing clients to get some distance from the issue to see how it might actually be helping them or protecting them more than it is hurting them.

²⁴ B.M. Dossey, L. Keegan and C.E. Guzzetta (eds.) *Holistic Nursing: A Handbook for Practice* (4th Ed.). (Sudbury: Jones & Bartlett Publishers, 2005).

and historical documents written on the theme. On the other hand, the survey on the views of individuals from the field covered a sample of 100 respondents. Field data collection involved the use of structured and semi-structured questionnaires and interview guide (as research tools) to collect data from a cross section of respondents.

Using the case study design, the method of simple random sampling was used to pick all respondents who answered the questionnaire. This included individuals within different age groups and of different educational and religious backgrounds who receive healthcare. Though the respondents were of different professional backgrounds, their understanding of the research theme proved essential to their responses and opinions. Also, 15 individuals (both males and females) were interviewed. Interviewees were selected based on their extensive knowledge of spirituality and in both traditional and modern healthcare delivery in Ghana. They included traditional healers/spiritualist (5), modern medical practitioners (5) and religious leaders (5). Some of these selected interviewees needed to have their set of questions interpreted to them in their native Akan language (Asante-twi) to help their understanding of the research variables in order to reduce the rate of non-response. Interview sections took place in palaces, shrines, homes, hospitals, clinics and offices of interviewees. Descriptive analysis was used for the data obtained as well as the Statistical Package for Social Science (SPSS –version 16.0) software to analyse the data.

RESULTS AND DISCUSSION

Demography of Respondents

Among the 100 respondents were 57 men and 43 women. The differences in their ages were as follows: 24 respondents below 25 years, 29 between 26-35 years, 21 between 36-50 years and 26 between 51 years and above. Among respondents, 34 were single, 22 were married, 14 were separated and 30 in co-habitation. In fact, none of the respondents indicated to be divorced. In the area of education, 34 respondents had obtained basic level of education, 43 with secondary education and 20 with tertiary education. However, 3 respondents had not received any form of formal education.

Respondents included Christians (38), Muslims (29) and Traditionalist (26). There were also 7 respondents who did not indicate their association with any of the three major religions in Ghana. As to whether they are adherents of any of the Eastern Religions or not leaves much room for further investigation. The table below further elaborates the demographic background of all respondents.

Table 1: Demographic background of respondents

Variables	Male	Female	Total
Gender	57	43	100
Age of Respondents			
Below 25 years	13	11	24
26-35 years	12	17	29
36-50 years	16	7	21
51 years and over	17	9	26
Marital status			
Single	20	14	34
Married	10	12	22
Separated	6	8	14
Co-habitation	17	13	30
Divorced	-	-	-
Education			
Basic	12	22	34
Secondary	31	12	43
Tertiary	14	6	20
None	-	3	3
Religious affiliation			
Christianity	21	27	38
Islam	21	8	29
Traditional	19	7	26
None	5	2	7

Source: Authors' construction 2018

On the other hand, among the 15 interviewees (traditional healers, spiritualist, modern medical practitioners and religious leaders) from the Akan community, it was identified that each interviewee was affiliated to one of the major religions in Ghana. The data obtained revealed that traditional healers and spiritualists had the lowest level of formal education as compared to religious leaders and modern medical practitioners. The reason being that all traditional healers and spiritualists had received only basic and secondary education indicating that higher level formal education is not common among this category of respondents. The table below provides the distribution of interviewee's religious affiliation and educational background.

Table 2: Religious affiliation and educational level of interviewees

Religious affiliation	Traditional/ Spiritual Healer	Modern Medical Practitioner	Religious Leader	Total
Christianity	0	2	3	5
Islam	2	3	0	5
Traditional religion	3	0	2	5
Total	5	5	5	15
Educational Level				
Basic	3	0	0	3
Senior High	1	0	2	3
Tertiary	0	5	3	8
Non-Formal Education	1	0	0	1
Total	5	5	5	15

Source: Authors' construction 2018

Spirituality-Healing Relations: Respondents' explanation of key concepts

Respondents shared views on the concept of spirituality, healing and medicine. All 100 respondents from the Akan community indicated to have an idea about the concepts. Depending on different educational and religious backgrounds, the understanding of the concepts varied among most respondents.

Spirituality was understood by respondents to mean the possession of forces beyond human control that might be as a result of his/her pious life; involvement in matters of the metaphysical realm; part of life which is invisible on the outside; dealing with divinities, and connection with miracles. Other respondents explained the concept to mean events in the world of the spirits, the sensitivity or attachments to many gods, spirit beings and religious values. According to the respondents who were Christians, spirituality is simply the acceptance of God and Jesus and the active relationship with the Holy Spirit. In an interview, some religious leaders explained it is the search for the sacred (i.e. set apart from the ordinary and worthy of veneration). Other interviewees also stated that it is the use of supernatural powers in the physical world. With this, it can be stated that respondents indicated an understanding of the concept as a way of life separate from the physical and beyond it.

Healing was explained by respondents as the art of overcoming diseases; reducing infirmity and disorders as well as regaining strength and good health –mentally, physically, emotionally and spiritually. For other respondents, it is the art of feeling better after a short or long period of illness; a positive state of health; a restoration of health; relief; growing sound and getting well. To a larger extent, the view of respondents indicated an idea of being well again. Many respondents also stated that healing is the relief or freedom from pain and disorders through prayers, supplications and deliverance, while few mentioned that healing emanates from divinities and supernatural world. In an interview, some interviewees (who were basically medical practitioners) disclosed that healing is when a “person recuperates or recovers fully from an ailment or sickness be it physical, spiritual or psychological”. Other interviewees also asserted that healing is the permanent holistic restoration of health. In their view, healing must set people free from both physical and spiritual disorders. However, healing is realized when there has been proper medication (treatment) and prayer (spiritual and divine assistance).

In answering questions pertaining to the relationship between spirituality and healing, many respondents were specific. 86 respondents were certain that spirituality of the traditional Akan society plays some role in healing. However, 14 respondents did not agree. Meanwhile, 87 respondents were of the view that healing is inseparable from spirituality as against 13 who thought otherwise. Nevertheless, 85 respondents agreed that spirituality and healing are good for the health system of a person as against 15 who did not. Interviewees stated that, in the past, healing and spirituality played a vital role in human life and in both modern and traditional medicine. They further stated that, in all forms of treatment, the combination of the use of herbs and spirituality has proven to be beneficial. In their view, since not all diseases can be treated by either medicine or spirituality, it will be appropriate to consider both aspects so that the positive effects of each may be fully realized.

Interviewees added that though healing and medicine may be different from spirituality, their purpose for humans can be similar in terms of disease treatment. If it is understood in this way, then healing and spirituality will be difficult to separate. A number of 96 respondents stated that they use medicine, while 4 said they did not. Among the 96 respondents, 35 of them preferred the use of traditional medicine as against 31 who preferred western medicine. Meanwhile 30 respondents said that they use both forms of medicine.

In explaining the concept of medicine, views of all respondents (100) attested to the fact that the concept of medicine was well known to them. Some respondents explained medicine to be the art of healing and treating illnesses, injuries and other bodily disorders; any substance applied internally and externally to the body for the purpose of curing diseases. Other respondents also explained medicine to mean the art of diagnosing in order to cure and prevent the occurrence of illness or the substantive means for ensuring good health. Furthermore, most respondents mentioned that medicine represents any solid or liquid substance used in curing infirmities. They stated that it was a substance intended for the purposes of healing. According to them, medicine is meant to restore, reduce and cure ailments. Generally, respondents mentioned some forms of medicine to include shrubs, syrups, herbs, tablets, capsules, seed, concoction, barks, roots and other chemical substances. From the views of respondents, it is clear that the purposes of medicine include healing, restoration, prevention, curing and promoting health.

Presently, there are two major types of medical practices (the traditional and modern scientific medical practices) In Ghana, and both forms of practice deal with illness and disorders.²⁵ The data obtained revealed the existence of both modern (orthodox) and traditional medicine among the Akan of Ghana. This is evident in the strong usage and appreciation of both medicines among the Akan. In various interviews, many medical practitioners acknowledged the use of traditional medicine themselves and were much concerned about their preparation and mode of preservation by some local practitioners. It was observed that both traditional and orthodox medicines have the same purpose; treatment of disease and restoration of health (whether scientific or non-scientific). It was further observed that the type of medicine which was preferred and used was as a result of its efficacy, availability, low cost of production, high scientific basis and support. Although the number of people who use traditional medications weighs more than those of orthodox medication, the effectiveness of both forms of medicines in the provision of good health is highly appreciated by many Ghanaians.

²⁵ P. A. Twumasi, *Medical System in Ghana: A Study in Medical Sociology*. (Accra: Ghana Publishing Corporation, 1975), 1.

Spirituality and Medicine

It was also realized that the use of traditional medicine involved the use of spirituality to achieve the appropriate cure, though some respondents denied the usefulness of spiritualism in traditional medicine. Some respondents believed that it is the herbs that actually heal and not the spiritualism that is most often associated with it. According to these respondents, God is the creator of all herbs –which are then meant to provide healing –and it is up to humans to know the herbs needed for a particular kind of disease or infirmity. This goes against some popular views like that of Quarcoopome²⁶ that God is the giver of all medicines and provides them to man through the tutelary or lesser spirits in the various communities. The world according to the view of indigenous societies is a world which is primarily spiritual, in that, what exists is spirits or spiritual beings which are capable of having an influence on the environment.²⁷

The research uncovered that spirituality cannot be separated from medicine (especially, traditional medicine). Spirituality connotes things that happen in the world of the spirits, divine life, supernatural forces, attachments to religious values, the relationship between man and religious objects, values and sacred. It is that which is believed to be beyond humans, their capabilities and thinking. In the traditional Akan society like many indigenous African societies, medicine is closely associated with religion and spirituality. Indeed, religion and spirituality are part of the life of the traditional Akan whose being stems from his relationship with the spiritual realm. A misreading of the spiritual realities of the African primal world has often resulted in the lack of recognition for such an identity with African medicine. It must be stated that what goes on in the actual daily religious life and spirituality –in the company of divinities, ubiquitous spirits and ancestors –is left virtually untouched.²⁸ This is in line with Nkemnkia-Nkafu's view that the connection between spirituality and medicine is inseparable and that the bond needs to be strengthened.²⁹

Many interviewees further stated the relevance of mystical powers to medicine among the members of traditional Akan societies. They asserted that mystical forces exist differently among different traditional spiritualists and healers. They revealed that mystical powers exist in the midst of indigenous medical care. They are sometimes used in the treatment of pregnant women and infants to protect them from spiritual attacks and ailments such as convulsions. They are used also in other health related problems as well as in problems of a social, economic or religious nature as a way of influencing the outcomes, both physical and spiritual. It was, however, noted that some mystical forces had the propensity of being used to cause evil. Some individuals acquired some of these forces to bring down other people and to cause them diseases and misfortunes like accidents and injury, the opposite of preventing diseases and promoting good health.

Historically, medicine and its practices have existed in almost all societies whether modern or primitive and that its provision has been the responsibility of families and individuals alike.³⁰ It is an institution concerned with combating disease and improving health.³¹ Moreover, it is to be stated that the improper intake of medicine, in respect of the dosage, also affects medicine

²⁶ See: T.N.O. Quarcoopome (1987), p.146 and 148; The Akan proverb 'if *Onyame* (God) gives you sickness, he also gives you medicine, means that god is the author and source of medicine'. Furthermore, every divinity is believed to have in his possession a particular set of remedies for the cure of his devotees.

²⁷ K. Gyekye, *An Essay on African Philosophical Thought: The Akan Conceptual Scheme*. (Philadelphia, 1987), 79.

²⁸ See: Bolaji Idowu in his seminal book '*Olodumare*' and other writings in: *God of Yoruba Belief*. (London, 1962).

²⁹ Nkemnkia-Nkafu, *African Vitalogy: A Step Forward in African Thinking*. (Nairobi: Pauline Publ., 1999), 189.

³⁰ *Ibid.*, 517.

³¹ J. J. Macionis and M. L. Gerber, *Sociology* (3rd Ed.). (New Jersey: Hall Allyn and Bacon, 1999), 516.

negatively. This may lead to the contraction of other diseases - thus, by inducing several other diseases (leading to the Doctrine of Double Effect³²).

Effects of their relationships Spirituality and Healing on the Akan

In an interview, some traditional healers and spiritualist asserted that the major impacts of spirituality may be seen in the recognition and treatment of spiritual attacks and sicknesses. According to them, spirituality as a way of life is important for humans and their well-being as healing and spirituality combine to treat diseases outright (physical and spiritual). In the opinion of many respondents, the use of spirituality serves as an alternative means to medicinal treatment of diseases. Concerning the implications of spirituality on medicine and healing, a majority of 92 respondents stated that spirituality has an impact on medicine and healing. However, 8 respondents did not acknowledge any effect of spirituality on medicine and healing.

In relation to the above, 65 respondents talked of having obtained spiritual healing in one way or the other. They talked of having received spiritual healing for diseases like; malaria, fever, hepatitis, ulcer, asthma, broken bones, barrenness, impotency, cancer, lungs infection, tuberculosis, headache, jaundice, typhoid, menstrual disorders, insanity, convulsion, blindness and joint pains. 22 respondents said they had not obtained any healing of this kind and 11 respondents did not express any view in this regard.

Respondents further explained that through prayers, rituals, communion, fasting, sprinkling and drinking of concoctions and through wearing mystical objects like talismans around the waist, they were able to experience healing. While 13 respondents attested that they still appreciate the use of spirituality in healing, 67 were indifferent, and 19 had no opinion. Some respondents (45) accepted the fact that healing provided by spirituality and mystical forces was effective as against 47 who rejected the idea and 8 who did not answer the question. 40 respondents were of the view that spiritual healing and mystical powers were meant to heal only diseases whose causes were spiritual: 60 did not agree. The latter (60 respondents) believed that spirituality was enough to heal both physical and spiritual diseases.

Belief in the impact of spirituality and healing was very positive among 94 respondents, though 6 respondents shared other views. The effects of spirituality and healing in Ghana were diverse among respondents. 21 respondents believed that the impacts were social, and 16 believed that they were economic. Also, 25 respondents agreed that the impacts were religious, and 15 that the impacts were psychological. However, the effects of spirituality and healing, according to 19 respondents, were possible in all spheres of life and in all societies. Meanwhile, 4 respondents indicated not to be aware of the above. The table below further explains the views of respondents as pointed above.

³² The Doctrine (or Principle) of Double Effect is often invoked to explain the permissibility of an action that causes a serious harm, such as the death of a human being, as a side effect of promoting some good end. It is claimed that sometimes it is permissible to cause such a harm as a side effect (or "double effect") of bringing about a good result even though it would not be permissible to cause such a harm as a means to bringing about the same good end. This reasoning is summarized with the claim that sometimes it is permissible to bring about as a merely foreseen side effect a harmful event that it would be impermissible to bring about intentionally.

Tab.10: Implications of spirituality and healing

Impacts of healing and spirituality	Frequency	Per cent	Valid Per cent
Social effects	21	31.3	31.3
Economic effects	16	17.0	17.0
Religious effects	25	17.3	17.3
Psychological effects	15	23.0	23.0
All the above	19	7.7	7.7
None of the above	4	3.7	3.7
Total	100	100.0	100.0

Source: Authors' construction 2018

Significantly, the connection between spirituality and healing was believed to provide essential implications on Ghanaian societies. These specific effects, according to interviewees, were essential for individuals and society at large. Many interviewed herbalists mentioned some of the major effects as: it provides cure for all alternative diseases that may prove difficult to be cured in orthodox healing as well as providing income and assistance for its practitioners and avoiding the expense of modern (scientific) medication. This emphasizes the fact that inasmuch as spirituality and healing were relevant, their relationship was effective for human development as well. Some of the impacts defined by respondents are outlined below.

a. Social Impacts

Among the social effects respondents stated that healing and spirituality ensured;

- Good relationship among humans in society (i.e. promote social relationship among spiritualist, healers, physicians and clients and also among family members).
- The provision of solutions to physical problems.
- Proper living conditions (as a result of the alternative form of cure provided by spirituality and medicine).
- The prevention of over exploitation of individuals by some spiritualist on one hand and healers on the other hand in the name of providing cure and healing.
- Assistance and direction to the social health needs of individuals.

b. Economic Impacts

Respondents further stated that the economic impacts of the relationship between healing and spirituality included the following;

- Provision of good (holistic) health for trading, schooling, farming, fishing, selling, and driving to obtain income and development.
- Restoration and recuperation of strength and health for socio-economic life and a resulting increase in productivity.

c. Religious Impacts

In addition, respondents stated that religiously, the relationship between medicine and spirituality;

- Eradicates negative notions that medication adulterates some basic doctrines of some religious groups
- Strengthens individual faith and spirituality
- Promotes changes in personal religious and spiritual lifestyle with regard to health.
- Sometimes leads to an attitude of indifference towards (personal) faith (especially when prayers and spirituality have proven futile).
- Ensures reverence for spirituality and the use of magical forces
- Ensures spiritual and emotional support

- Promotes religiosity, (thus, for some people medicine and spirituality serves as the reason for religion).

d. Psychological Impacts

Respondent stated some of the psychological effects of healing and spirituality as follows.

- Lack of realization of the natural cause of disease or ill-health
- Failure to seek proper scientific healing and treatment in times of sickness
- The attribution of diseases to spiritual causes only.
- Belief in the permanent cure of diseases/illnesses
- Certainty in treatment and healing
- Eradication of depression, Assistance and hope

e. Health Impacts

The last of the impacts, according to the respondents, were health related. They stated that healing and spirituality lead to the;

- Complete/absolute restoration of physical health.
- Holistic deliverance and healing of the body from diseases.
- Prevention and treatment of diverse forms of disorders.
- Proper growth and mental well-being of individuals/patients.
- Total prevention and protection from infections.

Tab.11: Percentage distribution on specific implications by respondents

List of impacts	Frequency	Per cent	Valid Per cent
Holistic healing of the human person	45	15.0	15.0
Regain socio-economic development	67	22.3	22.3
Commitment to spiritual values	56	18.7	18.7
Psychological support	63	21.0	21.0
Recognition for Proper health care	58	19.3	19.3
Not applicable	11	3.7	3.7
Total	300	100.0	100.0

Source: Author's construction 2018

Negative Impacts of Spirituality-Healing Relations

On the other hand, the research outlined a number of observations that sought to deny the positive impacts of healing and spirituality in the Akan community of Ghana. First among them is the fact that the inclusion of spirituality in disease treatment can lead to the lack of confidence in physical, scientific and secular treatment of diseases. This, according to informants, challenges the credibility of secular treatment (orthodox medicine). As a result of this, the patronage of such forms of treatment can be affected. This in their view seeks to depreciate modern medicine which they believe primarily exists outside spirituality.

Interviewees revealed that absolute healing based on spirituality in the view of many respondents will in the course of time lead to over-reliance on spiritual/faith healing to the neglect of modern scientific medicine. They posited that until equal recognition is given both to secular and spiritual treatments, over-reliance on any of the two forms of treatment cannot be halted.

They added that over-reliance on spiritual healing has directly or indirectly led to the influx of patients into religious camps rather than hospitals, resulting in the following;

- Misuse of spirituality by some spiritualists and charlatans to extort money from patients and manipulate clients.
- Use of indigenous mystical forces to cause evil and diseases instead of providing healing.
- Relegation of patients' spirituality in healthcare by some medical professionals.
- Lack of recognition for traditional medicine due to its relationship with spirituality by modern and scientific medical practitioners.

As a matter of urgency, these problems need to be solved in order to harmonize the relationship between healing and spirituality and their impacts on the Akan people.

This is not to say that healing and spirituality may not have negative effects on individuals. In respect of this, not all medicines are accepted or used by people for curing diseases. This is because some of them may be put to detrimental use by immoral individuals.³³ In same vein, there are people on whom no spirituality has any effect, even though there may be diverse forms of spirituality. While some people may have a secular spirituality³⁴ or a religious spirituality, others have none at all. Spirituality, of course, may be used for good and for bad purposes. It may be used in harming physical life, more than promoting it.³⁵ This is not to talk of the misuse, overuse and side effects of medicine as exposed to be real in the World Health Organization survey in 2003.³⁶

Development of Healing and Spirituality in Promoting Akan Healthcare

The nature of spirituality and healing is such that it has attracted several diverse views with respect to its development. 61 respondents asserted that spirituality, mystical powers and indigenous religious objects must be advanced in modern medicinal practice. This view was, however, not the same with all respondents as 39 of them rejected such a suggestion. In view of this when respondents were asked whether they must be allowed to exist only among the rural folks, 41 responded yes and 69 said no. Significantly, 56 respondents asserted that spirituality and healing must be promoted but 44 rejected the idea. Overall, healing and spirituality are recognized among many respondents. 71 respondents regarded spiritual healing as very relevant in health care in general, but 29 thought otherwise.

IMPLICATIONS OF THE STUDY

It is worth noting that the overall health of an individual is achieved through a combination of physical, mental, emotional spiritual and social well-being. This research is very important for all involved in the health care industry as it throws more light on the connection between spirituality and healing. It provides more insights to health personnel and authorities on better ways to promote holistic healthcare, while resolving the constant barrage of negative press on Akan traditional healthcare and spiritual systems. In furtherance, an assessment of the impact of the relationship between spirituality and healing, as contained in this paper, re-introduces the significance of spiritual systems on health and illness, and provides more information on better ways to holistically care for the sick.

³³ Nkemnkia-Nkafu, *African Vitalogy: A Step Forward in African Thinking*. (1999), 189.

³⁴ Secular Spirituality is the adherence to a spiritual philosophy without adherence to a religion; it emphasizes the personal development of the individual, rather than a relationship with the divine or spirits.

³⁵ Nkemnkia-Nkafu, *African Vitalogy*. (1999), 189.

³⁶ World Health Organization, *Medicines: Safety of Medicine -Adverse Drugs Reactions*. (2003 updated on 2008). (<http://www.who.int/mediacentre/factsheets/fs293/en/index.html>: 7th December, 2017).

CONCLUSION

Knowledge on spirituality and healing as dual means in ensuring good health, though complex, has become very common. It is of greater insight to mention that though several individuals have sought to separate healing from spirituality, the research to a larger extent has established an existing relationship between them. This relationship has existed for several centuries since the introduction of medicine. In traditional Akan societies of Ghana, a lot of significance is attached to the concepts of spirituality and healing which in many ways aid development. Similar to global research trends³⁷, this research establishes connections between spirituality and quality of life. This study indicates that healing and spirituality ensure and maintain holistic health which, in effect, promotes an increase in productivity, social relationship, hope and religious commitment among the Akan people and Ghanaians as a whole. However, the paper cautions against over-reliance on spirituality which may be detrimental to physical development.

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Explanatory Factors Associated With ICT Integration In Teaching Secondary School Agriculture: Case Of Southern Africa (Swaziland)

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ABSTRACT

As ICT continues to make head way in the Western countries, the African countries are lagging behind and this widens the gap in respect of North-South digital divide. The focus of this paper is factors associated with integration of ICT in the teaching of secondary school agriculture. This is a case study of Swaziland, a country in Southern Africa. The study adopted a descriptive survey research design. Population of study was a census of secondary agriculture teachers and employed a survey questionnaire. Data analysis employed descriptive statistics and regression. Findings established that teachers do occasionally use ICT tools in instructional delivery. Factors influencing ICT integration: 1) Digital proficiency in using ICT tools, 2) Social influence, 3) Sharing digital content with learners, 4) Possession of personal computer, and 5) Internet connectivity. It was recommended that teacher pre-service education should prioritize integration of ICT in the teacher preparation programme. School administrators should buy into Internet connectivity for their schools.

Keywords: ICT integration; Technology adoption; Secondary education teachers; Teaching Agriculture; ICT tools;

INTRODUCTION

In developing countries, the cost associated with adopting ICT to include acquisition of hardware and software, setting up telecommunication networks, and the maintenance and repair of facilities is often prohibitive. Generally, African countries have poor infrastructure to include unreliable transportation, limited electricity supply, and telecommunication facilities. This has a bearing on the institutions capacity to maintain Internet connectivity. The cultural context of ICT adoption, language barriers, and attitudes towards ICT affect the rate of adoption (Kinuthia, 2009). Perceived difficulty the integration of ICT in teaching and learning comes from the belief that technology use is challenging, implementation requires extra time, technology skills difficult to learn, and cost of attaining and maintaining resources prohibitive.

Education as the conduit for human development needs to take heed of the changes in job market place. It is critical that the current generation of learners must be well-prepared with ICT knowledge and skills for them to face the world of work in view of the development and usage of ICT. ICT has become an important component of education in many countries, developed and developing. ICT enhances teaching and learning process by increasing learners' motivation; the use of ICT in the classroom helps in explaining difficult concepts such that learner are able to easily understand those concepts (Alazan, Bakar, Hamzah & Asmiran,

2012).The integration of ICT in education can take several forms such as information and computer networks, digital content, Internet sites, and multimedia. In Alazan, Bakar, Hamzah &Asmiran (2012), ICT integration is defined as ICT use in classroom teaching; in vocational and technical education, ICT integration involves using instructional software in the course, making presentations, carrying out activities in workshops and/or application services.

Preservice teacher education has a critical role to play in the integration of ICT in the teaching and learning. In order to produce the kind of learner that meets the contemporary labour market dictates, it is necessary to transform schools of education into the 21st century learning organisations. In short, preservice teachers must be ICT literate and updated in pedagogic innovations. This requires time allocation, resources, and a comprehensive pedagogical, technological and organisational support system (Goldstein, Shonfeld, Waldman, Forkosh-Baruch, Tesler, Zelkovich, Mor, Heilwel, Kozminsky, Zidan, 2011).

In an endeavour to enhance student learning and achievement, many schools have jumped on to the bandwagon to engage in information technology (IT). This paradigm shift in thinking has culminated in many scholars engaged in unpacking what IT integration in teaching-learning means in the school context. The infusion of ICT in educational institutions has great implications for teaching and learning. The definition of ICT integration adopted in this paper is “the use of computing devices such as desktop computers, laptops, tablets, software, or Internet for educational purposes” (Hew & Tan, 2016).

In contemporary society ICT persists with over three billion people having access to the Internet (Williams & Gift, 2016) ; with about 8 out of 10 Internet users owning a Smartphone, information and data are increasing by leaps and bounds. “This rapid growth especially in developing countries, has led ICT to become a keystone of everyday life, in which life without some facets of technology renders most clerical, work and routing tasks dysfunctional” (Williams & Gift, 2016). Of the 4.3 billion people not yet using the Internet, 90% live in developing countries. However, it is worth noting that Internet use is growing steadily at 6.6 % globally in 2014 (3.3%) with 8.7% in developed countries and 8.7% in developing countries, Internet users in developing countries doubled in five years (2009-2014), with two thirds of all people online now in the developing world (Williams & Gift, 2016). In the Sub Saharan Africa (SSA) where ICT use in teaching and learning is deemed important, the integration is not fully utilised as expected and experienced in the developed countries.

ICT Integration in Sub-Saharan Africa (SSA) school context

Including Swaziland, Governments in SSA are prioritising teacher development as critical in effectively implementing policy and curricula, using ICT to enhance teaching and learning and thus raising educational standards. In SSA, schools are increasingly being equipped with computers for teaching, learning and administrative purposes; connectivity is improving and learner enthusiasm is on the rise. Selected SSA countries are developing digital content in the respective subject areas. However, the major impediment to integration in the SSA context, including Swaziland, is treating ICT as a discrete subject in the form of computer science or information technology in the assessment by the local examination boards.

While developed countries have reported up to 41% integration of ICT into teaching and learning, the proportion remains substantially low in Africa. Singapore established four stages for ICT integration in education: Firstly, envision the future, secondly, develop country master plan, thirdly, implement initiatives and lastly evaluate and adapt Government policy for educational transformation (Nchung, Sakwa & Mwangi, 2013). In Swaziland, the use of ICT in many settings is increasing rapidly. As a result, ICT education has become basically every

society's effort to teach people under various settings because people need valuable knowledge and skills about computing and communications devices, software that operates them, applications that run on them and systems that are built with them (Dlamini & Dube, 2014).

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Theoretical foundation

Key to factors associated with theorised ICT integration is Perceived Usefulness (PU) and Perceived Ease of Use (PEU) of ICT product use. Perceived usefulness is a primary determinant and perceived ease of use is a secondary determinant of people's intention to use computers (Davis, 1989). Technology Acceptance Model (TAM) points out that perceived ease of use and perceived usefulness affects the intention to use. Perceived ease of use is defined as the extent to which a person believes that using a particular system would be free from effort and perceived usefulness as the degree to which a person believes that a particular system would enhance his/her job performance (Davis, 1989). This paper is about integration which connotes a sense of acceptance within the user environment. The TAM has been applied in developing countries. Ease of use is a major constraint for the adoption and use of the Internet innovations in Kenya (Gode, Obegi & Macharia, 2013).

Teacher characteristics

Most pre-service teachers entering college have basic ICT skills from high school and positive attitudes towards ICT integration in teaching and learning (Goldstein, Shonfeld, Waldman, Forkosh-Baruch, Tesler, Zelkovich, Mor, Heilwel, Kozminsky, Zidan, 2011). Pre-service teachers are exposed to ICT integration in courses offered in colleges, but mostly to traditional approaches while innovative models of ICT integration, e.g. collaborative learning, inquiry, web-based synchronous and asynchronous. (Successful integration of ICT in teaching and learning is largely depending on the availability of ICT infrastructure and teachers' adoption and embracing it (Mathipa & Mukhari, 2014). Teacher competency is a key and indispensable factor to ensure successful use of ICT in the teaching and learning environment. Teachers are expected to be digital competent to cope with the 21st century skills enabling them to produce learners to create and share higher order thinking skills, collaborate with other learners, and manage and control their own learning (Mathipa & Mukhari, 2014). One major challenge identified in developing countries pertaining to adoption of ICT in schools is inadequate IT professionals with education professional qualifications. To harness ICT for school purposes requires sustained investments in supporting training of teachers. Successful integration of ICT into the classroom depends on the ability of teachers to structure learning environments in non-traditional ways, merging technology with new pedagogies.

School management

In the experience of Israel, most leaders in the colleges of education do not cooperate in giving ICT giving ICT top priority nor is there strategic planning or allocation of resources (Goldstein, Shonfeld, Waldman, Forkosh-Baruch, Tesler, Zelkovich, Mor, Heilwel, Kozminsky, Zidan, 2011). Over and above teacher competency and positive attitude, adoption and use of ICT in schools require visionary leadership. School leaders as well as teachers need to be knowledgeable about the potential ICT presents in teaching and learning. If this knowledge is missing, formulated government policies and ICT investments made in the school, opportunities are missed to meet desired school reforms and goals (Mingaine & Skill, 2013). Information technology will easily and smoothly be implemented in schools if the Principal actively supports, learns as well, and provides or supports adequate continuing professional development Afshari et al. (2012). In essence, Principals are key determinants in the implementation and integrating of ICT.

Digital proficiency in the use of ICT tools

In Afshari et al. (2012) high levels of skill and knowledge proficiency of ICT would produce higher levels of technology integration among teachers. Afshari et al. further postulated that teachers with higher levels of ICT skill and knowledge would exhibit higher levels of technology integration in the classroom.

Social influence

In Liu and Kotsiwa (2013), social influence is a situation in which an individual considers using a particular technology because of other people's suggestions. Furthermore, social influence connotes the individual's internalisation of the reference group's subjective culture, and specific interpersonal agreements that the individual has made with others, in specific social situations. Afshari et al. (2012) found that computer use in the classroom was closely associated with administrative support and peer support. In Kurga (2014) one potentially important contextual factor which shapes how technology is perceived and used by teachers is the community of practice associated with their subject.

Sharing digital subject matter content with learners

When learners know the benefits of engaging in technology, they are likely to be motivated and become frequent users of ICTs. This connotes that teachers must be competent users of technology to create platforms where information sharing can occur with learners. In Divaharan and Ping (2010) successful learning organisations, to include school, need a curriculum overarching ICT goals to provide clear direction to the key players: teachers, head of departments, ICT teachers, and learners.

Possession of personal computer

Possession of a personal computer indicates a positive attitude towards ICT integration in teaching secondary school agriculture. Ang'ondi (2013) asserts teachers who are said to have bought own personal computers in an attempt to curb the problem of inadequate ICT resources in their respective school spend more time after working hours on their school work for the benefit of learners.

Internet connectivity/availability

Alabi (2016) presents the following as barriers to ICT integration: Access to appropriate ICT equipment, lack of time for training, exploration and preparation negative attitude towards ICT, ICT anxiety, lack of ICT technical support, administrative, and instructional support, and most importantly lack of infrastructure, Internet connectivity.

Teacher work load, age, gender, and digital divide

In Kinuthia (2009) states that in many instances teachers believe that using computers deprives learners of time needed to study for their national examinations and that computers disrupt the traditional structure of the classroom. Among other things, teacher workload is a factor influencing adoption of ICT infrastructure in teaching and learning (Gode, Obegi & Macharia, 2014). Heavy teacher workload occasioned by high class enrolment as well as level of education to include computer prior experience influence perceived ease and perceived ease of use (Longe, Boateng, Longe & Olatubosun, 2010).

Age and gender are non-manipulative factors at teacher level. Computer anxiety is often highlighted as the fundamental problem behind the digital divide (Abbiss, 2008). There are contradictions in research about the influence of gender on the use of ICT (Jones, 2004). Age can influence the uptake of ICT for teaching (Prensky, 2001). There is a distinction between ICT natives, born in a digital world, and digital immigrants who have to learn the digital

language and for whom ICT will always be a second language (Andoh, 2012). Other than age and gender, the teaching subject matter influences ICT use. School subject culture are built on deep traditions and these need to be considered in ICT usage as embedded in the school curriculum.

Teacher adoption and integration of ICT into teaching

Increased workload coupled with teaching with technology is critical to the participants (Ang'ondi, 2013). Factors reported contributing to increased workload were constant upgrades, student emails, the learning of new skills and continuous search of sustainable strategies. A computer coordinator noted that increased workload of teachers was alarming; on asking them to take on board yet another task on an already overcrowded curriculum and extremely busy workday is pushing many teachers to the limits and beyond.

A study conducted in Kenya determined five themes on teachers' attitude and perceptions on the use of ICT in teaching and learning (Muhammed, 2010), namely: ICT infrastructure, knowledge and skills, attitudes and beliefs, and the curriculum. The study reported that ICT resources were inadequate and this was the reason most of the teachers did not have time to use the ICT room. Teachers lacked the skills to manage an ICT integrated class. Other teachers felt ICT integration in teaching was an additional bother to their already so huge burden. Lastly teachers felt that school curriculum is loaded with too much work against the backdrop of little time allocation to the extent that teachers have to find extra time to complete the syllabus. This naturally discouraged teachers to use ICT which they claim is time consuming.

Constraints encountered in the integration of ICT in the teaching of agricultural education in Nigeria were identified: (a) inadequate funding, (b) lack of motivation, (c) poor staff development, and (d) inadequately trained ICT compliant teachers (Eickelmann, 2011). ICT can be a powerful catalyst in improving teaching and learning for all and that they should play part in broadening access to ICT and engaging by empowering learners and teachers to see technology in creative and innovative ways. Educators' knowledge and willingness to adopt ICT is often associated with sociological factors such as age and teaching experience in using ICT. Supportive and hindering factors to a sustainable integration of ICT in schools were identified as the way Principals perform as school leaders and how ICT use meets the pedagogical aims (Alabi, 2016).

STATEMENT OF THE PROBLEM

Africa, in particular Sub Saharan Africa (SSA), does not have the infrastructure or the skilled manpower to ICTs adoption and integration into teaching and learning. Learning opportunities provided by the increasing use of technology in classrooms are not being harnessed in schools (Zwane & Dlamini, 1999). Integration of ICT depends on the availability of ICT infrastructure and teacher competence is the key factor indispensable. In spite of the availability of computer laboratories and other ICT tools, teachers expressed various issues impeding the use and integration of ICT (Dlamini & Dube, 2014). In the Sub Saharan region, integration is not fully embraced as expected and experienced in developed countries. In Swaziland adoption and integration of ICT is at the infancy stage. Factors associated with ICT integration in teaching agriculture at secondary schools have been inadequately documented and determined in Swaziland. The research question:

What factors are associated with ICT integration in teaching secondary school agriculture in the Swaziland context?

Purpose and objectives: The purpose was conducted to determine factors associated with ICT integration in teaching secondary agriculture in the Swaziland context, a developing country in Southern Africa. The objectives were to: 1) Describe ICT integration by agriculture

teachers in teaching secondary school agriculture in the Swaziland context; 2) Identify explanatory and predictor factors associated with ICT integration in teaching secondary school agriculture in the Swaziland context

METHODOLOGY

Research design: The study was a descriptive survey research design. Descriptive survey research is intended to produce statistical data about aspects of education that interest educators and policy makers. It is an approach of collecting information by using a survey. Descriptive surveys are designed to secure information on the current status of a phenomenon

Population: The target population were agriculture teachers ($N=312$). A Census study was conducted, therefore, all agriculture teachers, both Modern Agriculture and Pre-Vocational Agriculture, were included in the study. About 284 out of 312 agriculture teachers returned usable questionnaires for analysis.

Instrumentation: Questionnaire was used for data collection. Development of the questionnaire was guided by literature review and semi-structured interview data collected in Phase I.

Validity: Survey questionnaire was validated for relevance of content by a Panel of ICT experts with experience in the teaching and learning environment.

Reliability of the questionnaire was computed after pilot tested with forty (40) final year Bachelor of Science in Agricultural Education students at the University of Swaziland and coefficient was $r=.85$.

Data collection and analysis: The survey questionnaires were delivered to respondents and collected on agreed dates. All questionnaires were coded to allow follow up on non-respondents. The Statistical Package for Social Science (SPSS) version 20.0 was used for data analysis. An *a priori* probability of $p \leq .05$ was established to determine the level of statistical significance. Descriptive statistics were used for analysis. Multiple regression procedures were employed to identify explanatory and predictor factors associated with ICT integration in teaching secondary school agriculture curriculum.

FINDINGS AND DISCUSSION

Findings

Objective 1: ICT integration by agriculture teachers in teaching secondary school agriculture

Means (M) and standard deviation (SD) values were computed for each item (Table 1). For purposes of interpretation of the rating scale denoted as follows: **00-99 to 2.99=Do not use, Very rarely, Rarely** and **3:00 to 5:00= Occasionally, Frequently, Very frequently**. Items in the first category are: **1)** Prepare tests using Word processing (3.52), and **2)** Search information through Internet for use in teaching (3.44). The remainder of the items fall in the second category.

Table 1:
Agriculture teacher engagement in ICT integration teaching at secondary school (N =284)

Item	Extent of Use	
	M	SD
1 Prepare tests using Word processing	3.52	1.73
2 Search information through Internet for use in teaching	3.44	1.49
3 Search Internet for journal articles	2.22	1.76
4 Prepare teaching time table on computer	1.99	2.08
5 Use a digital camera to take pictures for lessons	1.20	1.52
6 Use a scanner to copy pictures or text	1.20	1.49
7 Keep enterprise records on a computer	0.99	1.54
8 Use mobile phone to disseminate information to learners	0.81	1.29
9 Prepare lesson plan using a computer	0.79	1.42
10 Access information on CD for teaching	0.71	1.16
11 Prepare power point slides for teaching	0.70	1.39
12 Use video clips to teach concepts	0.57	1.14
13 Use an overhead projector for teaching	0.50	1.17
14 Distribute information on flash drive to learners	0.50	1.07
15 Give assignment to learners using Internet	0.47	1.01
16 Use e-mail to send electronic materials to learners	0.44	0.64
17 Use a tape recorder for teaching	0.20	0.68
18 Use a radio in class for teaching	0.14	0.54
Overall	1.13	1.28

Rating scale: 0 = Do not use, 1= Very rarely (*once a month*), 2 = Rarely (*2-3 times a month*), 3 = Occasionally (*2-3 times a week*), 4 = Frequently (*almost every day*), 5 = Very Frequently (*every day*)

Objective 2: Factor associated with ICT integration in teaching secondary school agriculture

In Table 2 R² values indicate the amount of variance explained by independent variables, while R² change values present the amount of variance explained by individual independent variables. Beta values indicate the relative importance of the variables in explaining or predicting variance on the dependent variable (Du Plessis 2010). Five variables were found to explain and predict ICT integration in teaching agriculture, Key variables were: (i) Digital proficiency in using ICT tools in teaching, (ii) Social influence, (iii) Sharing digital subject content with learners as notes, (iv) Owning a personal computer, and (v) Internet connectivity in the school (Table 2).

The cumulative variance (R²) in ICT integration explained by the independent variables was 31%. Digital proficiency of the teacher explained 14% with a beta value of .56. Adjusted R² measures the proportion of the variation in the dependent variable accounted for by the explanatory variable. Therefore, even though the residual of sum of squares decreases or remains the same as new explanatory variables are added, the residual variance does not change. Hence, adjusted R² is considered a more accurate goodness-of-fit measure of R². Adjusted R² confirms the independent variables account for 31% of the variance on dependent variable (Figure 2)

Table 2:
Explanatory and predictor factors associated with ICT integration in secondary school agriculture

Factors of ICT integration	R	R ²	R ² change	B	B	t-value	P
1. Digital proficiency in using ICT tools in teaching	.38	.14	.14	.56	.38	6.81	.00
2. Social influence	.46	.21	.07	.23	.27	5.04	.00
3. Sharing digital subject content with learners using ICT tools	.51	.26	.05	.45	.23	4.14	.00
4. Possession of personal computer/laptop	.53	.29	.03	.30	.17	3.23	.00
5. Internet connectivity at school	.56	.31	.02	.24	.16	3.04	.00
Constant	.88						

P ≤ .05

Adjusted R² = .29; Standard error = .15

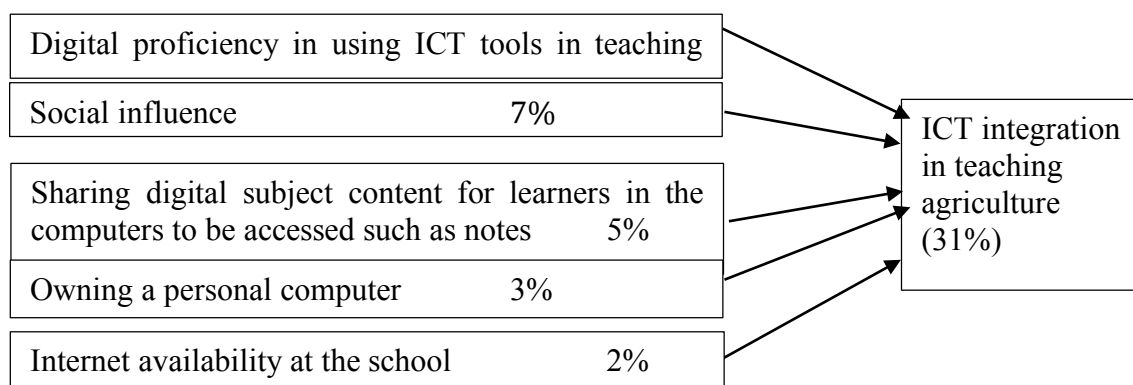


Figure 2: Explanatory factors associated with ICT integration in teaching secondary school agriculture

DISCUSSION OF FINDINGS

Objective 1: ICT integration in Teaching Secondary School Agriculture: Agriculture teachers occasionally use ICT tools in preparing tests. Furthermore ICT tools are also used in searching information on the Internet for use in teaching. These activities are occasionally (2-3 times a week) carried out. Teachers were not frequently engaged in ICT integration related tasks in their teaching. Other ICT integration related activities rarely engage in include: 1) preparing teaching time table using computers, 2) using digital camera to take pictures for lessons, and 3) using scanners to copy pictures from books.

Agriculture teachers rarely (once a month) keep enterprise records on computers, use mobile phones for dissemination of information to learners, preparing lesson plan using computers, accessing information on CDs and preparing power point presentations. These activities are tied to the use of computers. The use of radio, audio, tape recorder, e-mails electronic transmission materials to learners such as giving assignment to learners using Internet was rarely performed. ICT integration at school exist in three levels Adeyinka, Adedeji, Majekodunmi, Lawrence and Ayodele (2007): (1) learning about computers for basic computer literacy, (2) learning from computers- that is, use as transmitters of knowledge, and (3) learning with computers when learners construct knowledge by designing and creating their own representations of knowledge through mindful and challenging learning situated in realistic and meaningful context; this is generative use of computers. Findings were consistent with the Adeyinka, Adedeji, Majekodunmi, Lawrence and Ayodele (2007) that Word Processing

and e-mail promote communication skills; database and spreadsheet promote organizational skills; and modelling software promotes understanding of Science and Mathematics concepts; agriculture is an applied science.

Objective 2: Explanatory and Predictor factors associated with ICT Integration

Digital proficiency in using ICT tools in teaching: This variable accounted for 14% of the variance on ICT integration in teaching secondary school agriculture. Teachers are expected to be conversant with ICT integration to reach a stage where learners would create new knowledge responding to problems in their locality. ICT integration in teaching starts with the teacher making the teaching-learning activities learner-centred. As regard ICT integration in the classroom, teachers were found to be skilled in Microsoft Excel, digital video and animation, and simulation (Alazan, Bakar, Hamzah & Asmiran, 2012). The teachers' level of ICT skill was found to be moderate. The teachers' proficiency in using ICT tools (hardware, soft-ware & networks) are consistent with Bhattacharjee and Deb (2016) that knowledge of ICT is required in teacher education training programmes, because it helps a prospective teacher to know the world of technology for the betterment of learners. Similar findings were found with high levels of skill and knowledge proficiency of ICT producing higher levels of technology integration reflected on positive student achievements (Afshari et al. (2012). Teachers with higher levels of ICT skill, knowledge, and tools exhibit higher levels of technology integration Afshari et al. (2012).

Social influence: In this study social influence explained 7% of the variance on ICT integration. Social influence was measured using administrative support and community of practice. In this study administrative support was important for ICT integration. The community of practice among members is important in promoting frequent use of ICT tools. Teachers and learners are expected to be actively involved in technologies that promote learning in solving problems. Social influence it was confirmed is a variable explaining and predicting ICT integration (Divaharan & Ping, 2010).

One potentially important contextual factor that shapes technology is perceived and used by teachers is the community of practice associated with their subject (Divaharan & Ping, 2010). Divaharan and Ping (2010) stated that besides infrastructure and hardware support, support from administrators and colleagues seemed an important motivating factor for teachers.

Computer use in the classroom is highly associated with administrative support and peer support Afshari et al. (2012). Faculty's belief in their computer competence was the greatest predictor of computer use in the classroom. In this study social influence was found to be one of the predictors of ICT integration in teaching secondary school agriculture. This confirms teachers need support from school administrators and peers.

Sharing digital subject matter content with learners: This accounted for 5% on ICT integration in teaching. Teachers use ICT tools to make learning materials accessible to learners. When learners know the benefits of engaging in technology, they are motivated. This predictor implies that teachers must be competent users of technology to create platforms where information sharing can be done with learners. Successful learning organizations, to include schools, need a curriculum focused, over-arching ICT goals to provide clear direction to key players, such as teachers and school administrators. This connotes that the whole school must have a plan for the integration of ICT.

Possession of a personal computer: In some schools it was determined that teachers were making personal investments in purchasing personal computers. Owning a personal laptop

accounted for 3% in ICT integration in teaching. Ang'ondi (2013) observed that many teachers are said to have bought their own personal computers to and curb the problem of inadequate ICT resources in their schools. Possession of a personal computer indicates a positive attitude towards ICT (Divaharan & Ping, 2010). In the context of Swaziland, the majority of agriculture teachers are reported to own personal computers.

Internet connectivity in schools: Internet connectivity in schools accounted for 2% in ICT integration. Internet is mostly used by teachers and learners to search for new information. There was a positive relationship between the usefulness of Internet for learning and teachers' willingness to interact with learners (Nyembezi, & Bayaga, 2015). Internet connectivity is a major setback in Swaziland in respect of ICT integration. The majority of agriculture teachers are in schools with no Internet connectivity. In Swaziland, the urban secondary schools are benefitting from unlimited Internet connectivity. This challenge is largely caused by service providers not prioritizing rural schools and concentrating on urban situated schools.

CONCLUSION AND RECOMMENDATIONS

Overall Conclusion

Teachers demonstrate some understanding of selecting appropriate hardware and software to make a lesson more meaningful to learners. ICT integration occasionally occurs in teaching secondary school agriculture. Agriculture teachers are moderately engaged in ICT integration activities. They are aware that ICT integration in teaching is not practical unless the subject matter content is digital. Agriculture teachers possess the knowledge of using various hardware and software for integration. As ICT integration is an instructional delivery strategy, teachers are aware of the potential benefits of using ICT to improve learning outcomes.

Teacher preparatory programmes must be redesigned to equip prospective teachers with digitisation competencies in ICT integration. Establishment of clear goals for pre-service teacher education concerning the important ICT skills is necessary to teach agriculture in the 21st century. Furthermore, the in-service teacher education sub-sector should be strengthened revamping aspects of ICT integration in teaching as an instructional delivery strategy. In-service training should infuse components of ICT integration.

Digital proficiency: ICT integration is linked to digital proficiency of the teacher in using ICTs. Agriculture teachers are expected to be proficient users of technologies. Agriculture teachers possess basic ICT integration competence acquired from the pre-service teacher preparatory programme. It is recommended that the National Curriculum Centre, producing and publishing teaching and learning materials, should be redesigned to include digitization of teaching materials.

Social influence: Social influence is a factor associated with ICT integration among the four major constructs of the Unified Theory of Acceptance and Use of Technology (UTAUT), namely: (1) Performance expectancy, (2) Effort expectancy, (3) Social influence, and (4) Facilitating conditions; social influence is a greater factor associated with ICT integration in teaching secondary school agriculture in the Swaziland context. Social aspects speaking to ICT integration must be strengthened. Parental support can be engaged to exploit the full advantages of social influence in schools motivating teachers towards ICT integration.

Possession of a personal computer: ICT integration in teaching requires teachers to spend time using computers searching for information thus possession of a personal computer is of significance. Personal computers may either be at the workplace or at home to allow more time

on the computer. Possession of a personal computer is indicative of high level of commitment on the part of teachers.

Internet connectivity in the school: The Internet is a major element of the infrastructure for ICT integration. The Internet is used to search for new information to support teaching and learning. Internet connectivity was a significant variable in explaining and predicting ICT integration, thus a factor associated with ICT integration. Many schools do not have Internet connectivity to develop innovative approaches and adopt latest technologies.

Overall Recommendations

Continuing professional development workshop or in-service training must be redesigned to enhance teacher proficiency in the use of ICT tools and integration. This will keep teachers digitally competent. This is necessitated by the findings that digital proficiency in using ICTs explains and predicts ICT integration in teaching.

Schools should partner with business and industry as well as government development partners to mobilize ICT resources to revamp secondary schools with ICT tools. Student to computer ratio should be reduced to facilitate learning and effective acquisition of ICT skills.

School administrators must be equipped with strategies to support ICT integration, promotion of community of practice among teachers must be fostered with ICT tools availability in schools with school administrators taking the leadership role.

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England in the poetry of Ahmad Shawqi

Nada Yousuf Al-Rifai

Shawqi was the greatest poet of his time and a literary phenomenon that shined in the Arab world for around forty years. After his return from Paris, Shawqi joined the retinue of Khedive Abbas Hilmi in 1892. Shawqi, Prince of Poets never ceased to compose poetry and prose for over forty years. His poetry is the largest poetry collection of all time in Arab literature.

Ahmad Shawqi was born in Cairo to a family closely linked to the royal palace. These relations had a great impact on the poet's life and his culture. It is true that these relations placed restrictions on his poetics (in some parts) and delimited his poetic course, yet they were also the reason Shawqi was sent to France to complete his education and made him (after his return from France) poet of the palace (poet laureate), creating the circumstances that enriched his experience and deepened his resources. These resources and opportunities were not available to other poets of his time.

Shawqi studied at Egyptian Civil schools. He joined Sheikh Saleh's elementary school at the age of four, and then joined the intermediate school in which he completed his basic education when he was fifteen years old in 1885. After, he joined the School of Law and for two additional years he studied and received a certificate in translation in 1889. At law school Shawqi perfected his abilities in Arabic language as a student of the Azharite Masters, which included Mohammed Bassiouni Albebany and Hussein Marsafy. At this stage he studied Arabic literature, poetry and prose. He made use of the study of law and political science in his poetry because it enabled him to spray the legal and political thought in its culture, thanks to his understanding of the political issues that his country was facing. This is what distinguished his poetry from the poetry of his contemporaries, whose poetry is predominantly rhetorical. At this stage, Shawqi also studied French, through which he was able to study European literature, human heritage and civilization, which paved the way to his scholarship to Paris.

"When Shawqi obtained the translation school certificate, Khedive Tawfiq had appointed his father as an inspector among the elite of the Khedive. Later on, Shawqi himself was appointed in that position. He had to spend that period of his life as a dependent of the Khedive, favoring him with his praising poems. The Khedive admired Shawqi's poem, as well as his intelligence, which neared him to him. Thus the Khedive offered him to travel to France. Shawqi rejoiced at the offer, and traveled in (1887) to the University of Montpellier." (Mahfouth 37-38).

Shawqi lived in France from 1891 to 1893. During this period he studied at the universities of Montpellier and Paris. Thus, he was distinguished among his contemporaries, which included the poets Hafeth Ibrahim and Mahmoud Sami Al-Baroudi, who did not leave the scope of the eastern Islamic language and thought. Shawqi was influenced by prominent French romantic poets such as Hugo, Musset and Lamartine. He also frequented the famous Paris theaters.

After completing two years in France, Shawqi visited England to become acquainted with its civilization in his third year, although he didn't like it. He returned to Paris and graduated from

the Faculty of Law. However, he stayed for another six months in order to explore the literary and artistic treasures of Paris.

Shawqi used to visit Paris in summer during which he chose a private café to meet with Arab and Western writers. Shawqi was also able to meet the French poet Paul-Marie Verlaine in a café which Paul-Marie frequented in the city of Paris (Shawqi 107) There he also met the Lebanese author, Shakib Erslan, and established a friendship based on literature and the humanity between them. Erslan read Shawqi's poetry and advised him to assemble them into a collection called "Al-Shawqiyat". Shawqi listened to this advice and created the collection later. Shawqi loved spending the summer months in Europe, but at the end of his life he changed his traveling from Europe to Lebanon due to its natural beauty and the love that its people showed him. (Shawqi 150)

Shawqi recalled those days with all their goodness considering the scholarship granted to him by the Khedive as a blessing, because it filled his eyes with the art and civilization of Europe, enriched his mind with the masterpieces of French literature and revived his poetic talent by reading the poems of Lafontaine, Hugo, Lamartine and others. It also acquainted him with the western playwrights Corneille, Racine, Molière, de Musée and others, which had a great influence on Shawqi's poetic drama (Al-Hurr 48).

Shawqi lived nearly four decades after his return from France, during which he continued his tender poetry and prose without stoppage. Shawqi's period of life can be divided into three distinct phases: the first phase between 1893 and 1914, when he was the poet of the royal palace in Cairo. The second phase extends between 1915 and 1919, during which Shawqi lived in exile in Barcelona, Spain. The third phase extends between 1920 and 1932, during which Shawqi was liberated from the palace restrictions.

SHAWQI AND EUROPEAN LITERATURE

Fawzi Atwi mentioned that: "Shawqi read the Turkish literature, the Greek literature, especially the Greek theater, from which the westerners inspired many of their plays. He also read the English literature and was influenced by everything he read, yet his influence by Arab literature remained stronger and more apparent in his poetry than any other literature" (153).

Shawqi, in the introduction of the first version of his poetry collection *Al-Shawqiyat*, revealed himself in his autobiography in which he described his culture since childhood:

"I entered the elementary reciting school of Sheikh Saleh at the age of four, and it was one of my family's felonies, which I forgave them for. Then I moved to Al-Mubtadayan school, then the intermediate school, where I was the second best student of this school at the age of fifteen. The principal was exceptional in granting me a price to study gratuitously, although I was not in need of this. After, my father decided that I should go to law school, in which I studied for two years. Later on the government decided to establish a translation department inside the law school, from which the competent translators graduated. The director advised me to enter this department, which I did, and stayed for two years. Then, the ministry of education granted me the final certificate in the art of translation.

Then I made contact with Khedive Abbas and remained in his service till it was the view of the Khedive that I should gain discipline in Europe. He made me choose what I wanted to study in the sciences, so I chose law, knowing that it was close to literature, and knowing that if you have no tongue you have no steady foot. The prince advised me to study both law and French literature as much as possible, and then I traveled at his expense, I was paid sixteen pounds a month.

It was the first time that I traveled by sea. When I arrived at Montpellier, I found the head of the mission waiting for me. He told me that the prince ordered me to spend two years in the city of Montpellier and two other years in Paris. No sooner had I finished the second year than the director of the Egyptian mission wrote to me a letter asking me to join him because he was going with his students to England to spend the holiday there. The prince would pay my expenses for this tourism if I wanted it to go. So I left Montpellier toward Paris for the first time and after two days, we traveled to the capital of England, where we stayed for about a month. Then I left it back to Paris, where I finished the third year of law and was awarded the final certificate in it. The prince saw that I should spend six months in which I could know the things of Paris and its people. Then I returned home, worn out of parting, and longing.

In 1898, the prince deputized me to attend The Orientalists' Conference in Geneva, Switzerland, on the behalf of the Egyptian government, where I stayed for a month and then left the conference to Belgium to see its capital and visit the exhibition that was held in Angers on that day."

The influence of the French literature on Shawqi's poetry, is reflected in some of his poems and mostly in his drama, Dr. Daif said: "Shawqi coped with the Romantics and who came after them, he coped with Shakespeare in introducing comic elements in his tragedies are elements not found at all in classic French drama. It was Shakespeare who brought them out, and was followed by the romantic school and their successors" (188-199).

ON THE CORONATION OF EDWARD VII

Shawqi composed this poem on the occasion of postponing the coronation of Edward VII, which was originally scheduled for the 26th of June, 1902. The ceremony had been postponed because the King had taken ill with an abdominal abscess that required immediate surgery.

لمن ذلك الملك الذي عز جانبه *** لقد وعظ الأملاك والناس صاحبه
أبيطل عيد الدهر من أجل دمل *** وتخبو مجاليه وتطوى مواكبه
ويرجع بالقلب الكسير وفوده *** وفيهم مصابيح الورى وكواكبه
ألا هكذا الدنيا وذلك ودها *** فهلا تأتى في الأمانى خاطبه
أعد لها إدورد أعياد تاجه *** وما في حساب الله ما هو حاسبه
مشت في الثرى أنباؤها فتساءلت *** مشارقه عن أمرها ومغاريه
وكاثر في البر الحصى من يجويه *** وكاثر موج في البحر راكبه
إلى موكب لم تخرج الأرض مثله *** ولن يتهادى فوقها ما يقاربه
إذا سار فيه سارت الناس خلفه *** وشدت مغاوير الملوك ركائبه
تحيط به كالنمل في البر خيله *** وتملاً أفاق البحار مراكبه

To whom belongs that influential kingdom?
Its owner preached the properties and the people.

Is the lifetime celebration cancelled due to an abscess?
Its ranges abated? Its processions folded up?

Its delegations return brokenhearted?
Among which are the lanterns and planets of people.

This is how life and its cordiality are,
Could it be begotten through aspirations?

Edward had prepared for the festivals of his crown
While what God had set up was not in his mind.

Its news spread all over the lands, thus they wondered
About its matter in east and west.

The roamers in the wilderness became more than its stones,
and the sea cruisers were more than the waves.

Towards a parade which earth never brought out like it,
and never will a similar to it waddle above it.

When it proceeds people walk behind it,
And the Kings commandos pull its stirrup.

Surrounded by his horses like ants in the wilderness,
While his vessels fill the seas' horizons.

HALL CAINE IN EGYPT WITH THE PRINCE OF ARAB POETS

On the first of July, 1907, Al-Liwaa' magazine published the following under the title "The story of Denshawai."

Among the English authors there is a noble one named " Bernard Shaw" who has a high heel in literature, especially in writing social and political novels. This author has recently published a book called *John Paul's Island*, whereas John Paul is a name called metaphorically for England; this book devotes a long chapter that reached seventy pages under the title of "The atrocities of Denshawai."

The Egyptian case began to win the support and compassion of the English writers and it may have been that the greatest writer who defended Egypt, following Bernard Shaw, was the famous Victorian novelist Sir Thomas Henry Hall Caine (1853-1931).

In part two of his poetry collection, Al-Shawqiyat (on page 95) mentioned that Shawqi held a banquet in the honor of the English author, Mr Hall Caine, during which Shawqi recited his dedicated poem titled (Egypt), whose opening included the following lines:

أيها الكاتب المصوّر صور // مصر بالمنظر الأنيق الخليق
أن مصر رواية الدهر فاقراً // عبّرة الدهر في الكتاب العتيق

Oh portraying Author! Portray ,
Egypt in a worthy elegant scenery.
Egypt is the time's novel, so read,
a lesson of the old age book.

"Al-Minbar" magazine published these verses for the first time on April 9, 1908 and introduced them by saying: " Hall Caine was a guest of Egypt since a month ago to gather the information and necessary materials to compose a novel about Egypt.* Shawqi invited him for a desirable banquet at his home in Al-Mataria, Among other invitees were Ismail Sabri, and Khalil Mutran, when he recited his welcoming lines."

The Egyptians, during the time when the national movement was at the height of its strength, have in fact earned at their side one of the greatest English writers, who appeared in October of 1908 in Hall Caine's novel *The White Prophet* (Caine 1909), whose appearance caused a great bluster in England.

During emergence of this novel, Al-Minbar's journal tactfully marked the role played by Shawqi to reach this conclusion. Dated November 25, 1908 under the title *Mr Hall Caine the novelist of the White Prophet and Ahmad Shawqi, the prince's poet* the journal pointing out that: "Mr Hall Caine, was in Egypt, in last year's winter when Shawqi invited him to his prosperous home .

The journal then reprinted the poem *Dear Author photographer pictures*, and started (at the same time) to translate chapters of the novel, which were published at the end pages of the Journal.

On June 15, 1909 Al- Mu'ayyad's journal, under the title *The novel of The White Prophet and Lord Cromer's objection to act it*, wrote the following: "Our readers have learnt, from what we had published before that in England they have abandoned performing the novel". The White Prophet composed by Mr Hall Caine about Egypt and its occupation in which he held Lord Cromer responsible for his deeds.

In the spring of 1908 (March and April). the actor and owner of the greatest theaters in England, Mr Fery* (not sure about the spelling of the back translated name), was impressed by the novel and decided to act it. He even came to Egypt in the winter for this purpose and studied the country and the scenery to create a realistic novel in its chapters and representation".

On June 30, 1909, Al-Mu'ayyad journal remarked, "The White Prophet novel was partly translated in Al-Minbar journal and on September 30, 1909, Hall Caine's remarks on his Egyptian novel were published on the occasion of preventing the representation of the novel. In his novel "The White Prophet" Hall Caine, while being the greatest novelist in England at that time, presented Lord Cromer in the image of the hero in his novel. When asked by Henry Wickham Steed (1871 - 1956) (the English journalist, historian and editor of *The Times* from 1919 until 1922) about this, the novelist replied: "undoubtedly, I meant Lord Cromer in the person of the protagonist Lord Nuneham and all the other Englishmen staff. The novel, in short, is about the tyranny of Lord Cromer, who enjoyed an authority greater than that of Pharaoh and Caesar, which made England in Egypt, "sit on the crater of a volcano. In December, 1909, Saleem Sarkis translated the entire novel and published it in turn.

A POEM AND A NOVEL

In the meantime, on April 25th, 1909, the *Al-Majala Al-Masriya* (Egyptian magazine) published another poem by Shawqi under the significant title: *The spring and the Nile Valley* (also published in Al-Mu'ayyad on May 3, 1909) and dedicated to the poem to Hall Caine, author of The White Prophet. It is published in the second part of Shawqi's poetry collection, Al-Shawqiyat.

At the end of his charming poem, whose opening was "*March approached, oh pal, let's salute the spring, garden of the spirits*", the Prince of Poets, Ahmad Shawqi dedicated wonderful lines to the famous English novelist Hall Caine and thanked him for what he has shown in his novel "*The White Prophet*" regarding anti-British policy and the opposition to the tyranny of Lord Cromer in Egypt.

Sabry, M. (1979). Pages 90-92.

هَوَلْ كَيْنِ مِصْرُ رَوَابِئَهُ لَا تَنْتَهِي ، مِنْهَا يَدُ الْكُتَّابِ وَالشَّرَاحِ
فِيهَا مِنَ الْبُرَيْدِيِّ وَالْمُزْمُورِ وَالنُّورَةِ وَالْفَرْقَانِ وَالْإِصْحَاحِ
وَمِنَا وَقَمْبِيرُ إِلَى إِسْكَندَرَ فَالْقَيْصَرَيْنِ فِذَى الْجَلَالِ صِلَاحِ
تِلْكَ الْخَلَائِقُ وَالذُّهُورُ حَزَانَةٌ ، فَابْعَثْ خَيْالَكَ يَأْتِ بِالْمِفْتَاحِ
أَفْقُ الْبِلَادِ وَأَنْتَ بَيْنَ رُبُوعِهَا ، بِالنَّجْمِ مُزْدَانٌ وَبِالْمِصْبَاحِ

Hall Caine, Egypt is a never ending novel,
 in the hands of writers and commentators.
 It contains parts of what was written on the papyrus, the psalm,
 the Torah, the Qur'an and the gospel.
 Menes and Cambyses to Alexander,
 the two Caesars and glorious Saladin.
 Those creations and ages are a cabinet,
 Send your imagination to get its key.
 Our country's horizon, while you are among its territory,
 Is adorned by the stars and the lightening moon.

Sir Thomas Henry Hall Caine (1853-1931) was an English Victorian novelist, biographer, critic and playwright. He was a prolific and commercially successful writer during his time, who wrote melodramatic and moral novels. Hall Caine had enormous popularity and was the best sales author of his time. The novelist became a familiar name during an astonishing period of more than forty years, during which he sold around 10 million copies of his 15 novels (Hammond, 2004).

THE WHITE PROPHET

The White Prophet (1909), is based in part on the Denshaway incident, which took place on June 13, 1906, when a shooting that occurred on a pigeon-hunt, was transformed into a murder and then a confrontation between the British occupation army and the population of Denshaway, a small village in the Nile Delta. When one soldier died as a result of exhaustion while fleeing the village of the Egyptian victim, the British army avenged his death by hanging four citizens, flogging eight and imposing long prison sentences on many others. The incident sparked widespread opposition to the occupation and eventually lead to the resignation of Lord Cromer, the British High Representative in Egypt. The White Prophet's novel faced many criticisms in the West, and Caine responded to his critics in a special print pamphlet titled *Why I wrote The white prophet* (London, 1909). The writer George Bernard Shaw also defended Caine in a pamphlet he called *Critics of the White Prophet* (Heinemann 1909). (Foulkes, 2008).

Alfred Charles William Harmsworth (1865–1922) the British Press Pole Publisher and owner of The Daily Mail and Daily Mirror and the tabloid press pioneer, was worried that the book would be translated into Arabic because of fear of harming the British cause. However, the translation actually took place in Egypt, and Hafez Effendi published it serially in his newspaper "Al-Minbar". B.L.Moseley wrote that Hall Caine's novel had ignited the Nile and was everybody's talk; the Egyptians and Europeans, as Hafez Effendi was publishing it daily and weekly, and the Grand Sheikh of Al-Azhar was pleased with it. (Allen, 1997)

Later on this work was also translated into Arabic in Sao Paulo, Brazil, by the Syrian writer Nazir Zaytun Al-Homsi (www.worldcat.org).

The poem was the reason for Shawqi's exile to Andalusia (Spain).

Shawqi did not hesitate to antagonize the British, which were owners of the commands and prohibitions in Egypt after they interfered with the royal palace. His stance against Lord Cromer, Evelyn Baring, (1841 – 1917), 1st Earl of Cromer, British Consul-General in Egypt, is proof. The story, in short, was that khedive Abbas reviewed the Egyptian army in the Halfa

Valley and criticized the order of one of its squads. Cromer was angry and considered it an insult to the military commander, Kitchener (Field Marshal Horatio Herbert Kitchener, 1st Earl Kitchener, (1850 – 1916) and asked for an apology from the Prime Minister Riyad. Prime Minister Riyad apologized and attacked Abbas and praised Lord Cromer. Consequently, Shawqi, in a poem, criticized Riyad and accused him of treason. Afterward, on the transfer of Cromer from Egypt in 1907, a farewell ceremony was held in his honor, in which Cromer denounced khedive Ishmael and his reign and dispraised the Egyptian. Shawqi arouse for the royal family and wrote this poem, which was the reason for his exile to Andalusia.

Humoud, M. (2003). Page36

أَيَامُكُمْ أَمْ عَهْدُ إِسْمَاعِيلَا ؟ أَمْ أَنْتَ فِرْعَوْنُ يَسُوسُ النَّيْلَا ؟
أَمْ حَاكِمٌ فِي أَرْضِ مِصْرَ بِأَمْرِهِ ؟ لَا سَائِلًا أَبَدًا وَ لَا مَسْئُولًا ؟
يَا مَالِكًا رَقِ الْعِبَادِ بِبِأَسِهِ ، هَلَا اتَّخَذْتَ إِلَى الْقُلُوبِ سَبِيلًا
لَمَّا رَحَلْتَ عَنِ الْبِلَادِ تَشْهَدْتَ فَكَأَنَّكَ الدَّاءُ الْعِيَاءُ رَحِيلًا
فِي كُلِّ تَقْرِيرٍ تَقُولُ : خَلَقْتُمْ ، أَفَهَلْ تَرَى تَقْرِيرَكَ التَّنْزِيلَا ؟
فَارْحَلْ بِحِفْظِ اللَّهِ جَلَّ صَنْدِيقُهُ مُسْتَعْفِيًا إِنْ شِئْتَ أَوْ مَعْزُولًا

Your days, or the reign of khedive Ishmael?
Or are you pharaoh, the handler of the Nile?

Or the commanding governor over the land of Egypt?
Never accountable nor liable?

O you who owns the slaves' necks,
Why wouldn't you take a way to the hearts?

When you departed from the country it sighed of relief,
As if you were a pejorative departed disease.

In each report you say: "I created you",
Do you consider your report the holy book?

So go away protected by God's Almighty deed,
resigned, if you like or deposed.

This poem, which consists of fifty seven lines, is considered among Shawqi's masterpieces. Abbas Al-Aqqad (the famous writer) mentioned that it was published only hours after the celebration (held by the Prime Minister Mustafa Fahmi Pasha) at the Opera House to honor Lord Cromer. This poem became a subject in newspapers and, because of it Shawqi, was exiled to Spain. He left to Barcelona in August, 1915, where he spent five years, which were the most fertile years of his literary life (Hamoud, 36)

In Spain, Shawqi learned more about Arabic literature and the Andalusian civilization. His linguistic ability was crystallized in multiple languages and he had access to European literature. During this period Shawqi was also in touch with the situation taking place in Egypt, and he became involved in popular and national liberation movements remotely through his poetry, which he wrote during exile. This poetry expressed deep feelings of sadness and homesickness for Egypt. Thus, here another trend was born in the poetry of Ahmad Shawqi, away from committing himself to complimenting as was the case prior to his exile.

Shawqi returned to Egypt early in 1920 and narrated the story of his exile in his book *Aswaq Al-Dhahab* (Gold markets). This was also narrated in his son Ali's book *My father Shawqi*, in

which he mentioned how Shawqi was taken out of Egypt with his family and a group of undesirable expatriates. The ship carried wrestling oxen sent to Barcelona, and when the ship was about to sink in the sea, the captain ordered the throwing of its load of bulls for the safety of the ship. See the complete poem in volume one of Shawqi's poetry collection: *Al-Shawqiyat*. For further details, you may also refer to Al-Hilal magazine, published January of 1915.

When the British exiled Shawqi, he wrote while on the back of a ship on his way to exile in Andalusia:

"The exile has its fear, and farness has its anguish; It has been fate's judgment, that we pass this water; while evil blazes, despair heats, the enemy avenges, and the opponent is in control gloating exultantly and smilingly over my grieves, and mocking at my tears. Foreign rulers exiled us, agents of aggression and injustice, we left them behind us rejoicing with gold bits, and having fun with halters, which they call rules. They beat us with a sword, which they did not rust, which they did not possess, raise or lower."

(Shawqi 28).

IN BARCELONA

When Shawqi was settled and assured in Barcelona, he began courting the English, hence he wrote the poem *Shakespeare* in 1916 and mentioned the genius of Shakespeare and the virtues of the Britons, saying:

أَعْلَى الْمَمَالِكِ مَا كُرْسِيُّهُ الْمَاءُ ، وَمَا دِعَامَتُهُ بِالْحَقِّ سَمَاءُ
 يَا جِبْرَةَ الْمَنْشِ حَلَاكُمُ أَبُوْتُكُمْ ، مَا لَمْ يُطَوَّقَ بِهِ الْأَبْنَاءُ أَبَاءُ
 مُلْكٌ يُطَاوِلُ الشَّمْسَ عِزَّتُهُ ، فِي الْعَرَبِ بِإِذْحَةٍ فِي الشَّرْقِ قَعْسَاءُ
 دُسْتُورُهُمْ عَجَبُ الدُّنْيَا وَشَاعِرُهُمْ ، يَدُّ عَلَى خَلْقِهِ لِلَّهِ بَيِّضَاءُ
 مَا أَنْجَبَتْ مِثْلَ شَيْكِسْبِيرٍ حَاضِرَةً ، وَلَا نَمَّتْ مِنْ كَرِيمِ الطَّيْرِ عَنَاءُ
 نَأَلَتْ بِهِ وَحْدَهُ إِنْكَلْتِرَا شَرَفًا ، مَا لَمْ تَنْلِ بِالنُّجُومِ الْكَثْرَ جُورَاءُ
 وَالنَّاسُ صِنْفَانِ مَوْتَى فِي حَيَاتِهِمْ ، وَآخَرُونَ يَبْطِنُ الْأَرْضِ أَحْيَاءُ
 تَأْبَى الْمَوَاهِبُ قَالِ الْأَحْيَاءُ بَيْنَهُمْ ، لَا يَسْتَوُونَ وَلَا الْأَمْوَاتُ أَكْفَاءُ

The highest of kingdoms is whose throne is water,
 and whose pillar is lofty by rightness.

Oh neighbors of *la Manche* , your fatherhood had beautified you,
 By what no father had neck banded his son.

A kingdom whose pride extends to the sun,
 extravagant in the west, impregnable in the east.

Their constitution is the world's wonder and their poet,
 Is God's generous hand on his creation.

No conurbation gave birth to a similar of Shakespeare,
 Nor did the precious birds breed a singing alike to him.

Through him alone, England won an honor,
 That no constellation has obtained, by many stars.

People are of two types; dead in their lives,
 and others, alive under the earth.

Talents decline, as the alive are unequal,
 And the the dead are inadequate to each other, as well

In elegy of Kitchener:

Field Marshal Horatio Herbert Kitchener won fame in 1898 for winning the Battle of Omdurman and securing control of the Sudan, after which he was given the title "Lord

Kitchener of Khartoum". Kitchener returned to Egypt as a British Agent and Consul-General. On the death of Earl Kitchener on the 5th of June, 1916 (aged 65), Shawqi wrote:

قف بهذا البحر وأنظر ما غمر ، مظهر الشمس وإقبال القمر
أين رومية ما قيصرها ، ما لياها المرينات الوتر
أين نابليون ما غاراته ، سنّها الدهر عليه من غير
قل لليث خسف الغيل به ، بين طم وظلام معتكر
أنظر الفلك أمنها أتر ، هكذا الدنيا إذا الموت حضر
ميتة لم تلق منها علزاً ، من وقار الليث أن لا يحتضر
أنتم القوم جمى الماء لكم ، يرجع الورد إليكم والصدّر
نشأ النيل إليكم سيرة ، لكمو فيها عظام وعبر
إقرأوها يكشف العصر لكم ، كل عصر برجال وسير
موقف التاريخ من فوق الهوى ، ومقام الموت من فوق الهدر
ليس من مات بخاف عنكمو ، أو قليل الفعل فيكم والأثر
شدتمو دنياه في أحسنها ، غزوة السودان والفتح الأغر

Stand at this sea and see what it overflow,
The sun's appearance and the moon's approach.

Where is Rome, what is its Caesar,
And what are its chord ringing nights?

Where is Napoleon, what are his raids,
upon time's vicissitudes, launched upon him.

Tell a lion who sank down in the thicket,
stuck between a collapse and turbid darkness.

Look at the ships, are there any traces?
so is the world when death attends.

A death from which you would find no scare,
It is among the lion's esteem not to suffer from dying.

You are the folk, to whom water haven belongs,
The approach and departure.

The Nile created a biography for you,
In which there are lessons and examples for you.

Read it, so that age will reveal to you,
every age through men and life stories

History's attitude is above fancy,
And death's position is over babbling.

The departed one is not unknown to you,
or of little deeds and impact among you.

You witnessed his world I its best,
the Battle of Sudan and the illustrious conquest.

ENGLAND AND EGYPT POST WORLD WAR I

Following the outbreak of the 1919 revolution, the British government felt that the Egyptians were resisting its policy and filled with indignation, which resulted in the outbreak of the revolution. The British government responded by sending a committee to Egypt to investigate the matter and discuss means to calm it down. On May 15, 1919, the committee was announced; headed by Lord Alfred Milner, then Colonial Minister, the committee was mandated to uncover the causes of the disturbances that recently occurred in Egypt, investigate the causes of the revolution, reach a level that would not conflict with its interests and make proposals to calm affairs. This committee was on a mission to Egypt between December, 1919 to March, 1920, to mend the British Egyptian relations and reconcile the British protectorate. The committee arrived in Egypt December 7th, 1919 and began promoting the idea of Egyptian self-government. However, the people revolted against the Committee and boycotted it because it overlooked the leader of the revolution, Sa'd Zaghlul.

After Egypt signed the Milner project on February 28, the majority of intellectuals were dissatisfied with it because it did not meet the hopes of the nationalists. Shawqi wrote a poem that implied metaphors that the project was not clear, and did not meet the Egyptian demands. He was looking at the divergent views in the project and so he called for cooperation and the elimination of disintegration, partisanship and division. In this poem he said:

والصبح يظلم في عينيك ناصعه ، إذا سدلت عليه الشك والريب
إن الرجال إذا ما ألجئوا لجأوا ، إلى التعاون فيما جل أو حزنا

The morning's whiteness gets dark in your eyes,
when you hang down on it doubtfulness and uncertainty.

Men, when asked for refuge, seek it,
In cooperation in dreadful or sad matters

Shawqi's poetry collection is full of various national meanings, while the newspapers guaranteed the spread of his poems and to speed its popularity among the people. The busy occasions also contributed to linking Shawqi's national sense with his contemporaries as he was very sensitive towards the incidents occurring in his homeland, Egypt, even while he was in exile. Where he picked up these occasions to declare through them an opinion or an attitude.

Fawzi Atwi declared that although Shawqi became attributed with non-Arab races, with a Kurd as father, a Turk as a mother, a Circassian fraternal grandmother, and a Greek maternal grandmother, his national loyalty was a subject of attraction between Egypt, Arabism and Islam. If policy, its conditions and vanquishing circumstances, were to silence the poet, either through manipulation or favoritism, the presence of Shawqi, in the midst of frenzied political atmosphere in Egypt, had the greatest impact on his psychology and the largest effect on his poetic gift.

Atwi, Fawzi (1973). Page 153.

All Egypt's dwellings turned into a large volcano, and the revolution exploded everywhere, in every large and small town, and remained for consecutive months. It was confronted by brutal shots and cannons, while hundreds of martyrs fell. Cairo and Alexandria followed many cities and were turned into massacres, in which blood flew rivers. All people called for martyrdom, while the enemy set up the trials for the revolutionaries everywhere and erected its gallows. The people grew more and more furious, enthusiastic and violent every day, while they willingly offered their multiplying victims that demanded freedom and independence. When

the British sent the Milner Commission to investigate and the people realized that it was evasive, the people remained in their rages and created demonstrations until September of 1919.

The English went on holding their military trials, which sentenced to penal servitude and hanging execution, while the revolution continued until the British announced the declaration of February 28, 1922. In this declaration they announced the end of British protection of Egypt and recognized it as an independent and sovereign state. This was a great success for the Revolution of 1919, although it did not succeed in evacuating the English who continued to interfere in the affairs of Egypt. In fact, Egypt remained in sovereignty as the protectorate of Britain and it was only cancelled in words.

Daif, Shawqi.[1984]. (pages 126-127).

After his return from exile, Shawqi became the nation's poet and expressed its issues. He did not miss any national occasion without participating with his poetry, a thing which was met by the nation with great appreciation and granted him a high status.

Among the best lines illustrated by Shawqi was his poem statement in 1924, when a group of young prisoners were released from jail and regained their freedom after they had been charged for conspiring against the occupiers:

يا مصرُ أشبالُ العرينِ ترعرعتِ ومشتِ إليكِ من السجونِ أسودا
قالوا أنتظم للشبابِ تحيةً تبقى على جيد الزمانِ قصيدا
قلتُ الشبابُ أتمَّ عقدَ مآثر من أن أزيدهمُ الثناءَ عُقودا
خرجوا فما مدوا حناجرهمُ ولا متوا على أوطانهمُ مجهودا
جادوا بأيامِ الشبابِ وأوشكوا يتجاوزونَ إلى الحياةِ الجودا
والله ما دونَ الجلاءِ ويومه يومُ تسميه الكنانةُ عيدا
يا فتيةَ النيلِ السعيدِ خذوا المدى واستأنفوا نفسَ الجهادِ مديدا
إنَّ الذي قسمَ البلادَ حباكمُ بلدا كأوطانِ النجومِ مجيدا
قد كانَ والدنيا لحدودِ كلِّها للعبقريةِ والفنونِ مهودا
إني نظرتُ إلى الشعوبِ فلم أجد كالجهلِ داءَ للشعوبِ مبيدا
الجهلُ لا يلدُ الحياةَ موأتهُ إلا كما تلدُ الرمامُ الدودا

O Egypt, the cubs of the den have grown up,
And have walked out of prisons as your lions.
They said, "Are you composing for young people a greeting,
that remains a poem along time?"
I said these young people have fulfilled the glory's necklaces,
so are not in need for any more praising necklaces.
They went out, and stretched out their throats,
and did not spare their homeland any effort.
They sacrificed the youth's days and were about,
to sacrifice their lives beyond.
By God, there is nothing beneath the day of evacuation,
that would be called in Egypt as a national day.
O young boys of the happy Nile take the range,
and resume the breath of long holy fighting.
God who allotted the countries had granted you,
With a glorious star country.
It was there when the entire world was in grave,
And was a cradle for genius and arts.
When I looked upon the peoples of many nations,

I have found no perishing illness like ignorance.
Deceased ignorance does not give birth to life,
except as rottenness gives birth to worms.

Ahmad Shawqi used to generally observe the Egyptian political field and extrapolate lessons from it. He did not let an incident pass without showing his opinion, apart from taking sides. He therefore addressed the leaders in 1925 regarding the memory of Mustafa Kamel with a poem on the occasion of the death of Lord Carnernon, who funded Howard Carter's mission for the exploration of the tomb of Tutankhamun. Carnernon attended the opening of the pharaonic cemetery and died six months later. Rumors about his death spread because of the curse of the pharaohs. Shawqi wrote:

مَنْ سَرَّهُ أَلَّا يَمُوتَ فَبِالْعَلَا ، خَلَدَ الرِّجَالُ وَبِالْفِعَالِ النَّابِئِ
مَا مَاتَ مَنْ حَازَ الثَّرَى أَثَارَهُ ، وَاسْتَوْلَتْ الدُّنْيَا عَلَى آدَابِهِ
أَفْضَى إِلَى خَتَمِ الزَّمَانِ فَفَضُّهُ ، وَحَبَا إِلَى التَّارِيخِ فِي مَحْرَابِهِ
وَطَوَى الْقُرُونِ الْقَهْقَرَى حَتَّى أَتَى ، فِرْعَوْنَ بَيْنَ طَعَامِهِ وَشْرَابِهِ
أَخْرَجَتْ مِنْ قَبْرِ كِتَابِ خُضَارَةٍ ، الْفَنُّ وَالْإِعْجَازُ مِنْ أَبْوَابِهِ

Whoever wishes not to die, it is by loftiness,
That men became immortal and by brilliant deeds.

He, whose body is obtained by soil, is not dead
While the world took up his literature.

He broke the time's seal,
And endowed history in its (prayer) niche

He folded the centuries backwards until he reached,
Pharaoh between his food and drink

THE POETIC THEATER BETWEEN SHAWQI AND SHAKESPEARE

A prominent event in the history of the translation of drama in Egypt happened in 1912 when a number of outstanding translations were published. It was an event that made a radical change in the field of drama translation and its emphasis on the criterion for the honesty of transferring the original work and the integrity of the language. Among these translations were Othello by Khalil Mutran and published by the Ma'aref Printing Press, and two translations of Julius Caesar, by of Sami al-Jaridini and Muhammad Hamdi. The introductions by which the three translators presented their works revealed their awareness of what they were trying to establish and the new production pattern of drama translation.

Critics compared Shawqi and Shakespeare, the drama's first poet. Yet in the judgment issued under their weighted scale, there was a degree of unfairness. Shakespeare practiced playwriting throughout the second half of his life, for almost a quarter century. He also performed as an actor at London's famous theatres, while Shawqi did not. Shawqi tackled theatrical writing only during the last five years of his life; however, his dramatic achievement was pioneering. In the virtue of leadership in Arab literature, Shawqi is still at the head of those who came after him and practiced poetic theater, and he remains a leader who inspired all those in the theatrical arts which appeared after his death.

Shawqi, in his poetic drama, kept pace with great novelists that include Shakespeare, Racine, Victor Hugo and others. He also filled a void that no Arab poet had filled before him. In the last

three years of Shawqi's life, people were taken by his plays, which were then represented at the Royal Opera Theater and the Azbakiya park theatre. The emergence of these plays was an important event in the Arab literature world, the world of poetry and the world of modern theater (Zaza 208).

Dr. Abdul Hakim Hassan singled out a comparative independent study entitled *Antony and Cleopatra* in which he demonstrated the link between Shakespeare and Shawqi in his play *The Death of Cleopatra*. He exhibited the contact between Ahmad Shawqi and Shakespeare, particularly as Shawqi was a universal poet who lived a part of his life in Europe and was briefed on the work of Shakespeare and others. He then paused at Shawqi's plays, the sources of his play, and the portrayal of characters and position and if they were in agreement or opposition to Shakespeare. Shawqi changed the nature of Cleopatra's image as she was presented in the European literature, resourcing a different cultural environment and taking into account that he presented this play to the Arab audience and to bring him closer to the Khedive royal court (Al-Mousa, 2007).

Shawqi released his poetry collection *Al-Shawqiyat* in 1927, the year that he reached the summit of his glory and felt that he had achieved all his aspirations and had the right to free his poetic talent from restrictions to set off toward a more amazing art, which he liked since he was a student in France. This was the "Art of drama". Shawqi had previously tried it while he was a student, and then turned away to poetry when his ambition enchained him to write under the control of the ruling palace, who adopted him as a mouthpiece and a praising tongue.

There is no doubt that Shawqi frequently visited French theaters while studying in France. Especially the theater of the comedian Francaise in Paris, the State Theatre, which used to and still presents classical poetic drama that includes both tragedy and comedy, in particular the plays of Racine, Corneille and Moliere. There is no doubt that he tended to emulate these (Mandour 69-70).

Since Sa'd Pasha Zaghoul was appointed as minister of education, teaching the English language changed completely. Previously it had only been taught superficially. English literature was firstly introduced during the academic years of 1907 – 1908, in which the assigned textbooks were Shakespeare's (Macbeth) of and Dickens' (The story of the two cities). In the academic year 1908 -1909, another two novels were introduced: Shakespeare's (Hamlet) and Thackeray's (Henry Esmond). In the year ,1909 –1910 Shakespeare's (Temple) was also assigned (Sabry 81).

Citing Taha Al-Tanahi (Memorial festival for Ahmad Shawqi) (1960). pages 188-189.

Here I found a chance to talk to our great poet, whereupon I asked him why he turned to theatrical poetry composing for narrative drama. Shawqi answered saying: "In my youth I knocked the doors of poetry, not knowing of its reality and mission what I know today. At the beginning of my life I did not find of poetry purposes except praise for a rank or lament for a great person. Then I wanted to have a better mission than this for my poetry. Thus, I tackled the Patriots, Islamics and nationalities, and contributed as much as I could, to the national renaissance at the days of Mustafa Kamel, then during the 1919 renaissance, and whatever branched out of these two of scientific and social risings. Later on I yearned to immortalize this art in the Arabic language, that which Shakespeare immortalized in the English language because I believe that Arabic poetry – contrary to the accusations of biased people – has room for the narrative play, which is easier to be memorized than prose, easier to perform, and has a stronger impact on the audience."

Please refer also to my previous research "The Influence of Greco-Roman Literature on the Poetry of Ahmad Shawqi"

The French and English dramas that Shawqi read and watched while studying in Europe had only a general impact on his poetry. He was drawn by the simplicity of the French theater and the loftiness of its poetry, as was the theater of Racine and Corneille. Shawqi was also attracted by the national historical series that Shakespeare composed about the history of his country, such as King Henry IV and Henry V, King Lear and other plays. Finally, he tended to write plays related to the lives of the contemporary society. Shawqi was influenced by the English theater, Shakespeare in particular, as it appears in his first play, *The death of Cleopatra*, from which inspired some of the play's scenery, as the meetings between Antony and Cleopatra, the scene of the death of Antonio, and the scene of the death of Cleopatra, which clearly showed the differences between and Shakespeare's acting theater and Shawqi's lyrical narrative method (Shawkat 36-38).

SHAKESPEARE IN EGYPT

In February 1927, Al-Helal magazine mentioned that the acting season at the Royal Opera House opened this winter with the performance of Shakespeare's plays. They were performed by Robert Atkins' troupe, the well-known English actor among an agreement with His Excellency, Ali Al-Shamsi Pasha, the Minister of Education, for the benefit of the students who were required to study Shakespeare's novels. Therefore, these plays were highly entertaining for the students. Shakespeare's dramatic novels received in Egypt what no other novels had received by theater writers of different levels and various trends. If the Egyptian public did not know Shakespeare, and the private did not recognize the secrets of his novels, everyone knew Hamlet and Othello.

Al-Helal magazine in February, 1927, remarked that since thirty years ago, His Excellency Ibrahim Zaki, a senior official in the Finance Department, cared for the translation of a summary of eight Shakespearian novels by Charles Lamb. Fifteen years later, His Excellency Ismail Abdel Mon'em, a staff member at the Ministry of Education, published a 120-page booklet entitled *On the Acting Theater*, which summarized seven of Shakespeare's novels: Coriolanus, Romeo & Juliet, Julius Caesar, Macbeth, Hamlet, Othello, and King Lear. Othello, or the Moroccan leader, was Shakespeare's first novel to appear in the Arab theaters.

ROMEO AND JULIET

The late Lebanese Journalist, writer, poet, and translator Sheikh Najib Al-Haddad (1867 - 1899), translated the novel *Romeo and Juliet* or *The Martyrs of Love*, for the Eskender Farah theatre choir. Sheikh Salama Hijazi played the role of Romeo, as did Abdullah Afendi Akasha. Both Mellie and Melia Diane played the role of Juliet, which was also performed by Mrs. Maryam Sumat and her sister Helena Sumat.

Najib Al-Haddad translated the novel *Romeo and Juliet* from French, and he tried hard to fill it with poems sought by the lovers, as he was famous for his longing prose and pleasant poetry. Thanks to Sheikh Salama, who perpetuated the poems of *Romeo* through his sweet and charming voice, you could hardly find one of those who attended the performance of Sheikh Salama that did not memorize one or more of his poems in the novel *The Martyrs of Love*, while those who were not lucky enough to hear it directly, enjoy listening to it on phonograph discs.

The late Tanios Abdu translated the novel *Hamlet*, while each of Sulaiman Effendi Al-Qardahi, Sheikh Salama Hijazi and Muhamad Effendi Bahgat were distinguished in the role of Hamlet. The Egyptian civil judge, Mohammed Effat Bey translated the novel *Macbeth* into poetry and

printed it, yet it was not acted and was translated into prose with some versification by the famous poet, Hafeth Ibrahim, but was not printed or acted.

KHALIL MUTRAN'S TRANSLATION

After George Abyad had completed his studies at the Conservatoire de Paris, and returned to Egypt, he composed his first theatre group and asked Khalil Mutran to translate for him some of Shakespeare's novels. Mutran fulfilled his request and translated three novels: *Macbeth*, *Hamlet* and *Othello*. Afterward, Mutran devoted himself to the study of Shakespeare because he believed that the Arabic language should not be deprived of it, thus he translated: *The Merchant of Venice*, *The Tempest*, *Richard III*, *King Lear*, and *Julius Caesar*.

Professor Sami Al-Jereidini translated both *Julius Caesar* and *Hamlet*. The first was published with an introduction in which he explained the difficulty of translating Shakespeare's novels into Arabic, in which he said:

"I would never have thought of translating this novel if I had not had Othello's translation as the biggest encourager. Not because I'm running in Khalil Mutran's track , but rather simulating the good ones. I believe that Khalil Mutran is the best Arab who can translate Shakespeare and he was perhaps the first one who really translated him. No wonder, as it says in English proverbs, that the geniuses easily familiarize. Yet I think that the ambiguity of the author's ideas in the Arabic version is due to Khalil Mutran's resort to the French translation, instead of the original English text"

Al-Jereidini's translation is accurate and smooth, without any decoration, variation or verbal fabrication.

SHAKESPEARE IN EGYPTIAN SCHOOLS

From year to year, one of Shakespeare's novels is taught in the final year of secondary schools, where students are tested over it as they take the baccalaureate exam. The students of the graduate teachers school study Shakespeare in detail. A series of lectures about Shakespeare is delivered at the Faculty of Arts at the Egyptian University. Therefore, several individuals have intended to translate Shakespeare's novels (plays) into Arabic to help the baccalaureate students to understand the original English texts. Most of these novels were translated by Mohammad Al-Sebaie.

Macbeth was translated to the students by Addul Fattah Al-Serenjawi, while *Henri IIX* was translated by Ya'qoub Eskender, Mahmoud Ahmad Al-Aqqad and Othman Al-Qirbi together, Muhammad Abdul Aziz Amin, and Paules Eskandar. Most of these translations are accompanied by comments to explain the mysteries of the novel.

Habeeb, Tawfeeq. *Shakespeare in Egypt* - p. 201-204. (Al-Helal) Magazine - Number 2 - February 1927.

THE DEATH OF CLEOPATRA

In September of 1929, upon the issuance of *The Death of Cleopatra*

By Ahmad Shawqi, Al-Osour journal wrote:

This poetic drama is considered the utmost of what the genius of the Prince of our poets has reached. It consists of around 1,200 verses. It alone guarantees to maintain (for him) an excellent status among the paramount of our prominent poets. Shawqi's debatable defense of Cleopatra is his artistic right, as an author and poet. His style was characterized by smoothness,

serenity and a musical ring. His dealings in directing the characters of the play, was in the whole successful. We congratulate him and congratulate our modern literature for this beautiful work.

Editor. *Criticism and Compilation* - p. 462. (Al-Osour) Magazine - Number 25 - September 1929. Cairo, Egypt.

ON THE TONGUE OF HAMLET

Sheikh Salama Hijazi (1852-1917) was the most popular and most influential singer of his time. His presence in a certain band ensured its great public success. The voice of Sheikh Salama alone was able to fill theaters. All the translators who were asked to translate the texts of a play to be performed by Sheikh Salama on stage were fully aware that an essential part of their task was to invest in the text spaces that allow singing and to also add musical phrases.

When Sheikh Salama, under the pressure of the critics who demanded him to present a theater free of singing, represented Hamlet without any singing parts, the audience, erupted in anger at the end of the play shouting, "We want Hamlet! There is still a part!". This forced Sheikh Salama to stop showing the play. He resorted to the Prince of poets, Ahmad Shawqi, who responded to his request and wrote for him a part, which was later published by Muhammad Sabry Al-Sarbouni in his book *Al-Shawqiyat Al-Majhoula* (The unknown poems of poetry), under the title *On the tongue of Hamlet*. Later on, after Tanyous Abdu published the play, he kept this part, which Ahmad Shawqi added, and noted in the margin at the bottom of the page that "this poem is composed by Ahmad Shawqi, the Prince of Poetry and the Prince's poet".

SHAKESPEARE AND SHAWQI

Shakespeare's plays were translated into Arabic and spread among the Egyptians, and thus took the nation's a share of the human heritage that was not imposed on them by those who rule them. That is the proof of the human "thought" in world literature, because it is a heritage saved for all human beings, to confirm the affiliation of man and civilization. And we can find common ground between the treated Shawqi with historical material in the poetry and treatment of Shakespeare, but with two main differences: The first is Shawqi's attitude of man and old heritage, and second is his own portrayal of the theatrical characters.

It seems odd that Shawqi was influenced by Shakespeare, because he did not know English and was unaware of English literature. Yet Shawqi, after returning from Paris, was in close contact with his lifelong friend the Lebanese poet and journalist Khalil Mutran (1872 - 1949) who was known as "Sha'er Al-Qutrain" (The poet of the two countries) because he lived most of his life in Egypt. Mutran translated four of Shakespeare's plays into Arabic: The Merchant of Venice, Othello, Hamlet and Macbeth. It was for these translations that Shawqi was attracted to the Shakespearian Theater. The following lines are part of a long lament poem that Khalil Mutran wrote upon the death of his old friend Shawqi. It shows the close bond between the two poets.

يا مَنْ صحبْتُ العَمْرَ أَشْهَدُ مَانحاً // في الشعرِ من متباين الأنحاءِ
إني ليحضرني بصادق حاله // ماضيك فيه كأنه تلقائي
من بدئه وججالك يفتح فتحة // للحقبة الأدبية الزهراءِ
حتى الختام ومن مفاخر مجده // ما لم يتح لسواك في الشعراءِ

O you! whom I accompanied throughout my life, I bear witness,
you were granting in poetry in various parts.

I recall, in its true state,
Your past, as if it were now in front of me.

From the very beginning when your intellect was opening,
Preparing for the bright literary era.

Until the conclusion, and among its proud glory,
It availed to you, what was not available to other poets.

Mutran, Kh. (1932 Dec). The everlasting Nile. *Apollo Literary Journal*, 490. Cairo, Egypt .

HAMLET

Mutran translated the Shakespearean poetry into prose, then Shawqi turned it into poetry. This is a back translation of Shawqi's translated poem named *Hamlet*, which sounds like a translation of a Soliloquy of Hamlet. It is worth noting that Shawqi might also have referred to French translations of Shakespeare's works.

لم يجن أمثالها قبلي على أحد أم ولكن بلا قلب ولا كبد وقبلها ما جنت أم على ولد منهانهاني أبي عن أن أمدّ يدي أمه رفاً وبها عادي الهوى أتند وقفت أمس ويومي للأسى وغدي كأنه نكدي في العيش أو كميدي ومثل وجدي قلوب الناس لم تجد فضعت بين الهوى والحقد بالرشد في دارنا الخلد آمال بلا عدد دنياي زولى خيال الشقوة ابتعد	دهر مصائبه عندي بلا عدد عمّ يخون وأم لا وفاء لها جنت على هموم العيش قاطبة لما مددت يدي بالشر منتقما رحمك رحماك يا ذاك الخيال وبها أنا الشقى المعنى الميتلى أبدا أمشي وراء خيال لا يفارقني وأهجر الوجد للثارات أطلبها هويت والنفس لا تسلو ضغائنها إن ضقت يا دارنا الدنيا بنا أملا صبأى ودّع شبابي سر جمامي جن
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An age whose misfortunes are countless to me,
Nobody before me ever reaped similar to them.

A betraying uncle and a disloyal mother,
A mother but without a heart or a liver.

She cropped upon me, the whole concerns of the entire life,
A thing which no mother, has ever done against her son.

When I extended my hand wickedly for revenge,
My father stopped me from stretching out my hand.

Oh ghost, mercy, mercy me, oh mother,
Be kind to me, oh love opposer slow down.

I am the ever miserable troubled afflicted,
For sorrow, I set up my yesterday, day and tomorrow.

I follow a ghost that never leaves me,
As if it were my life's unhappiness and displeasure.

I deserted passion, asking for revenge,
and like my passion no human heart would find

I fell in love while my soul would forget its rancor,
Hence, I got lost between passion and hatred, seeking the right path.

If you worldly life became fed up with us,
In the hereafter life there are countless hopes.

Oh, boyhood leave me, youth move on, death approach,
Oh life, come to an end, and ghost of unhappiness go away.

Shawqi's translation was most likely an adapted translation of the following original Soliloquy of, Hamlet: Act 1, Scene 2, Page 5.

O, that this too solid flesh would melt
Thaw and resolve itself into a dew!
Or that the Everlasting had not fix'd
His canon 'gainst self-slaughter! O God! God!
How weary, stale, flat and unprofitable,
Seem to me all the uses of this world!
Fie on't! ah fie! 'tis an unweeded garden,
That grows to seed; things rank and gross in nature
Possess it merely. That it should come to this!
But two months dead: nay, not so much, not two:
So excellent a king; that was, to this,
Hyperion to a satyr; so loving to my mother
That he might not beteem the winds of heaven
Visit her face too roughly. Heaven and earth!
Must I remember? why, she would hang on him,
As if increase of appetite had grown
By what it fed on: and yet, within a month—
Let me not think on't—Frailty, thy name is woman!—
A little month, or ere those shoes were old
With which she followed my poor father's body,
Like Niobe, all tears:—why she, even she—
O, God! a beast, that wants discourse of reason,
Would have mourned longer—married with my uncle,
My father's brother, but no more like my father
Than I to Hercules: within a month:
Ere yet the salt of most unrighteous tears
Had left the flushing in her galled eyes,
She married. O, most wicked speed, to post
With such dexterity to incestuous sheets!
It is not nor it cannot come to good:
But break, my heart; for I must hold my tongue.

Shawqi was a broad-minded man, flowing with emotion. His emotions were not confined to a country or a nation, but encompassed all people. He shed tears for Paris, in its ordeal during the first world war, and Tokyo when the earthquake struck, praised the glory of Rome, and lamented Napoleon and the fifth earl of Carnarvon. All these were praised in his poetry. In addition, he praised Kitchener, Hall Caine, Tolstoy, Freddy, Hugo and Shakespeare and many others.

I left out many details to avoid overlapping with my current research. For further information please refer to my previous studies, cited beneath.

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Teachers' Professional Ethics and Instructional Performance as Correlates of Students' Academic Performance in Secondary Schools in Owo Local Government, Ondo State, Nigeria

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ABSTRACT

The study investigated teachers' compliance with professional ethics and instructional tasks performance, and determined the implication on students' academic performance in secondary schools in Owo Local Government Area of Ondo State, Nigeria. Three research questions were raised and two hypotheses were formulated to guide the study. 90 top management officers (principals, vice principals, heads of departments, guidance and counselors, and examination officers completed questionnaire titled "Teachers Professional Ethics and Instructional Tasks Performance Questionnaire (TPEITPQ), and Students' Academic Performance Profoma (SAPP)) in nine (9) secondary schools using randomly sampling technique. Data were analyzed using frequency count, percentage, mean score and Pearson Product Moment Correlation Coefficient (PPMCC) at 0.05 level of significance. The findings revealed that there is a significant relationship between teachers' professional ethics and instructional performance [$r(88) = 0.694, p < 0.05$], also there is significant relationship between teachers' instructional tasks performance and students' academic performance [$r(88) = 0.79, p < 0.05$]. The level of teachers' compliance with professional ethics was high in the components of: punctuality (68.9%), communication skill (63.3%), human relations (61.6%), effective time management (66.6%), adequate knowledge of subject matter (67.8%) and good dressing habit (81.2%). Further findings revealed that teachers prepare their lesson notes promptly (68.9%), conduct continuous assessment (73.3%), maintain good classroom management (66.7%), ensure students' discipline (81.1%) and participate actively in committees' work (75.6%). The level of students' academic performance was above average. Based on the findings, it was concluded that principals should collaborate with other professional bodies to organize intensive and regular seminars/workshops for capacity development of teachers to enhance professional conduct. Also, the state government in collaboration with other relevant stakeholders in the education sector should create enabling environment to enhance teachers' professional ethical standards and provide adequate learning facilities/materials to boost teachers' instructional tasks performance and achieve better academic performance of students in secondary schools

Keywords: secondary school, professional ethics, instructional tasks, instructional performance, students' performance

INTRODUCTION

Teachers' professional ethics are the prescribed norms, values, principles, rules, regulations and standards governing teachers' professional conduct. The quality of education and students' performance depends on teachers' instructional tasks performance which is guided by ethics of the teaching profession. Teachers are expected to demonstrate expert knowledge and specialized skills in translating educational policies, principles and curriculum contents into actions during teaching-learning process in order to achieve the desired learning outcome.

Instructional tasks are statutory curricula functions that are performed by teachers to enable learners achieve the set educational goals in schools. This means that the real teacher must possess the qualities for effective teaching and learning. The teacher must know what to teach, how to teach, and whom to teach. The purpose is to deliver the curriculum effectively and efficiently, so as to achieve the set goals and standards in schools (Ayeni, 2011; Koleoso, 2002). Teacher's instructional task performance is facilitated by the ability of the teacher to demonstrate sound professional attributes like scholarship through continuous research and it is pivotal to successful teaching, students' learning outcomes and attainment of quality education in secondary schools. Teachers' professional ethics are manifested in their knowledge of the subject-matter, pedagogical skills and competences in the teaching-learning process, which leads to the accomplishment of the stated educational goals. Bangbade (2004) found that teachers' professional ethics have significant relationship with students' academic performance; such professional ethics according to Bangbade (2004) include teachers' knowledge of the subject matter, communication skill, emotional stability, good human relations and interest in the job.

The quality of students' academic achievement in Nigerian secondary schools has been observed to be dwindling/relatively low as revealed in the percentage of students who obtained credit level passes in five subjects including English Language and Mathematics in the West African Senior School Certificate Examinations which reflected 52.92% in 2016, 59.22% in 2017 and 49.98% in 2018 (Adenipekun, 2018). This relatively low level of performance could be partly attributed to lack of teachers' full commitment to professional ethics.

This study is significant because it will provide more insight into the professional ethics of teachers in Owo Local Government Area, Ondo State, Nigeria and world at large. The findings of this study will guide school principals, educational planners and other stakeholders in the education sector on how to enhance teachers' compliance with professional ethics for better teaching-learning process and students' academic performance in secondary schools. The outcome of the study will serve as reference point for future researches on teachers' professional ethics, instructional tasks performance and students' academic performance.

Concept of Teaching Profession

Teaching is the art of imparting knowledge to the learners. This is the primary duty of a teacher who has gone through a proscribed period of professional training. Teaching is not a profession for 'all comers'. This is the reason why the Teachers' Registration Council of Nigeria (TRCN) was established by Decree (now Act) 31 of 1993. The Council became operational by June, 2000. It is aptly stated in section 5 sub-section 100 (a) of the National Policy on Education that "Teachers' Registration Council of Nigeria (TRCN) shall continue to register teachers and regulate teaching profession and practice" (Federal Republic of Nigeria, 2013). The TRCN among other responsibilities has the mandate to enforce professional ethical conduct among teachers and prosecute erring ones using the Teachers Tribunal which has powers under the law to met out punishments. The Teachers' Registration Council also has the responsibility to support continuing professional development of teachers and promote teaching as a profession (Teachers Registration Council of Nigeria, 2005). When teachers are seen upholding a sound professional conduct, it creates a high level of public confidence and trust in the teaching profession. Since its inception, the TRCN has taken up the challenge of ensuring that teachers in the profession are actually trained and certified to do their job well. However, students' academic performance is relatively low in Nigerian secondary schools probably because the schools are still riddled with teachers who lack full commitment to professional ethics.

In Nigeria, the Teachers' Registration Council has stipulated that all teachers should abide by its code of ethics. Furthermore, the council has the mandate to publish and maintain codes of professional conduct for teachers, which shall include the standards of teaching, knowledge, skill and competence. The Teachers' Registration Council of Nigeria (TRCN) is committed to ensuring that the code of professional conduct for teachers is promoted and observed by ensuring that every teacher possesses the prescribed teaching qualification(s) and registers as a member of the TRCN. This is to maintain public trust and confidence in the teaching profession. Akuezilo and Akudolu (2006) posited that TRCN has made the mandatory continuous professional education part of the requirements for renewal of teachers' practicing licenses while teachers at all levels of education without teaching qualifications are mandated to undergo a Postgraduate Diploma in Education (PGDE), in order to become certified teachers.

Teachers' Professional Ethics

The term ethics also known as professional conduct refers to the manner in which a person behaves, especially in a formal organisation. It is characterized by comportment, demeanor, and how an employee organizes and performs a particular activity. Conduct could also mean the procedures adopted by an organization in directing and managing its human and material resources, and activities to achieve the set goals. In the school setting, teachers are expected to demonstrate full professional commitment to official responsibilities, transparency, equity and accountability. Since no education system can rise above the quality of teachers, they are expected to have sound intellectual skill, communication skill, integrity, respect, trustworthiness, caring, confidential, good dressing habit, and guidance oriented. These core values are further highlighted and explained as follows:

Intellectual skill

Teachers' professional ethics emphasizes the need for them to improve their knowledge of the subject matter and the teaching skills they learned in pre-service courses they attended. This is due to knowledge explosion in the changing world which requires teachers to keep abreast of innovations in curriculum development and pedagogical skills in order to improve teaching-learning process and learners' academic performance in schools.

Communication Skill:

The teacher will do well by communicating with the students, using appropriate linguistic medium of instruction. Teachers are expected to communicate effectively with students, colleagues, parents, school management and others in the school community in the manner that is professional.

Respect: This presupposes that teachers should uphold human dignity and promote equality, emotional and cognitive development. It is ethical for teachers to abide by contractual obligations and the rule of law. Teachers should also demonstrate respect for spiritual and cultural values, diversity, social justice, human rights, freedom, democracy and environment.

Integrity: This entails being honest, straightforward, reliable and morally upright which are demonstrated through absolute professional commitments in performing their responsibilities within the framework of stipulated national and school policies, procedures, guidelines and regulations which aimed at promoting students education.

Care: Teachers should have positive influence and empathy in practice. Teachers should be caring, fair and committed to their job, and seek to motivate, inspire students for academic success, and ensure welfare and safety.

Trust: Teachers should maintain culture of mutual trust and respect in their schools; maintain positive relationships colleagues, parents, school management and the public. Trust embodies fairness, openness and honesty.

Confidentiality: Teachers should respect the privacy of others and the confidentiality of information gained in the course of professional practice, unless a legal imperative requires disclosure or there is a legitimate concern for the well being of an individual.

Dressing habit

It is a common knowledge that 'dress the way you will want to be addressed'. Teachers are expected to be role models to their students. Unfortunately, this is not the case in most instances as students made jest of teachers who have been observed to be shabbily dressed. Generally speaking, students do not consider just the teachings alone, but also the dressing as their teachers' appearance can make the students to love or hate the subject, which ultimately affects their academic performance.

Guidance:

Guidance simply means to lead or direct. Teachers' guidance is important because students follow the leading of the teacher in problem solving. Guidance helps the students to improve on their study habits, which directly affects academic performance. Mushtaq and Khan (2012) posited that teacher guidance improves teaching procedures especially when the teacher actively engages the students in the learning process. Teachers who involve students in learning activities reduce deviant behaviours. Students are also guided when teachers enforce school rules and regulations as well as applying sanctions without favour (Oyinloye, 2010).

Teachers' Professional Ethics and Instructional Performance

Instructional tasks are statutory curricula functions that are performed by the teachers to enable learners achieve the set educational goals in schools. This ultimately depends on the capacity of teachers to make effective use of instructional resources to ensure quality teaching-learning process (Ayeni, 2011).

Instructional quality depends on the ability of the teacher to demonstrate sound professional attributes like scholarship through adequate research, critical thinking and problem solving that facilitate effective teaching-learning process. The quality of instruction is manifested in teachers' knowledge of the subject-matter and pedagogical skills. This means that the real teacher must know what he is to teach, how he is to teach, and whom he is to teach. The purpose is to deliver the curriculum effectively, so as to achieve the set educational goals and standards in schools (Ayeni 2011; Koleoso, 2002).

The teacher instructional performance is crucial to effective and efficient learning; the teacher is expected to provide essential inputs like adequate planning of lesson notes, effective delivery of lessons, proper monitoring and evaluation of students' performance, providing regular feedback on students' performance, improvisation of instructional materials, adequate keeping of records and appropriate discipline of students to produce and enhance expected learning achievement in secondary schools (Ayeni, 2011).

The teacher promotes quality education from the domain of teaching and learning through creative idea, participation and cooperative learning, research, critical thinking, problem solving and innovation. These lead to the proper development of knowledge, skills, attitude and values that enable students to achieve desirable results and function effectively in the society.

In order to ensure effective teaching and learning process, it is imperative for the teacher to possess a good measure of professional ethics such as self-understanding, psychological awareness, professional commitment and insight, and demonstrate expert quality in the performance of instructional tasks (Bottery, 2008).

Teachers' Professional Ethics and Students' Academic Performance

Academic performance is the outcome of education acquired by the students. This shows the grade/marks obtained by students in tests and examinations. It can be said to be the accomplishment of students' achievement measured against predetermined educational standards/goals.

Craig (2009) maintains that education will be more beneficial to students in the 21st century in following areas: 1) acquisition of knowledge and skills, and application of what have been learnt to deal with real world challenges rather than simply reproducing the information on tests for academic excellence; and 2) ability to think critically about information and solve novel problems, communicate, collaborate and adapt to change.

Creamers (1994) stated that what makes an effective teacher includes having a positive attitude, development of pleasant social/psychological climate in the classroom, having high expectations of what students can achieve, lesson clarity, effective time management, the use of variety of teaching methods, using and incorporating students' ideas, and using appropriate and varied questioning. Also, Smith (1995) maintains that teachers' behaviour brings about positive classroom interaction and arouses learners' interest to learn even difficult concepts, irrespective of gender. This contributes significantly to students' academic performance.

Berry (2015) stated that the teacher's competence fosters students' mastering of content while analysing, synthesizing, evaluating and producing information from a wide variety of subjects and sources. Berry (2015) further advocated that students should be able to demonstrate the 3Cs, including creativity, communication and collaboration, while learning of this nature demands well prepared teachers who are well grounded in ICT in order to access and use information in helping students to enjoy learning and build intellectual capacity for sound academic performance.

However, many teachers are still unable to use the computer which makes them to remain at the level of operating with conventional methods and ideas in teaching their students. Unfortunately, such students can only reproduce whatever they have learnt, but may be unable to develop the idea of innovation which is needed for sound academic performance.

Statement of the Problem

It is a common knowledge that when teachers are seen upholding sound professional conduct, it creates a high level of public confidence and trust in the teaching profession. However, the issue of declining academic performance of students in Nigeria secondary schools has generated much concern among stakeholders in the education sector. This has been partly attributed to lack of teachers' full commitment to professional ethics, which affects students' academic performance. This public outcry calls for further investigation into teachers' compliance with teaching professional ethics (norms, values, principles and regulations) in the performance of instructional tasks, with a view to determining their implications on students' academic performance in secondary schools, using Owo Local Government Area of Ondo State, Nigeria as a case study.

Research Questions

The following research questions were raised to guide the study.

1. What is the level of teachers' compliance with professional ethics in secondary schools?
2. What is the level of teachers' effectiveness in instructional task performance in secondary schools?
3. What is the level of students' academic performance in secondary schools?

Research Hypotheses

The following research hypotheses were formulated to guide the study.

HO₁: There is no significant relationship between teachers' professional ethics and instructional task performance in secondary schools.

HO₂: There is no significant relationship between teachers' instructional task performance and students' academic performance in secondary schools.

Research Method

The study adopted the descriptive survey and *ex post facto* research designs. Two (2) Local Government Areas were randomly selected out of the six (6) Local Government Areas in Ondo North Senatorial District of Ondo State. Three research questions were raised and two hypotheses were also formulated. Respondents comprised 90 school administrators (principals, vice-principals, and heads of departments) randomly sampled from 9 secondary schools in Owo Local Government Area of Ondo State, Nigeria. Data were collected using "Teachers Professional Ethics and Instructional Tasks Questionnaire" (TPEITQ) and "Students' Academic Performance Proforma" (SAPP). The instrument utilized a four-point Likert rating scale classified as Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) with value of 4, 3, 2 and 1 respectively.

The questionnaire contained 11 items which cover variables such as punctuality, knowledge of the subject matter, preparation of lesson notes, communication skill, time management, human relations, dressing habit, class management, continuous assessment, students' discipline, and committee work. Students' academic performance variable is the achievement recorded in the West African Senior School Certificate Examinations (WASSCE) between 2015 and 2017.

The research instrument was validated by experts in the Department of Educational Management, Faculty of Education, Adekunle Ajasin University, Akungba-Akoko and Test and Measurement Unit, Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria. The experts made necessary scrutiny and modification to ensure that the questionnaire items adequately covered all the different dimension of the component variables in the research questions and hypotheses. The reliability of the instrument was confirmed through test and re-test at two weeks interval in two schools outside the Local Government Areas of the study. This yielded a correlation co-efficient of 0.76 that indicated high reliability of the questionnaire items constructed.

The researcher visited all the schools selected for the study to administer questionnaires. The researcher sought for the permission of the principals and solicited for the cooperation of the respondents in completing the questionnaires. The researcher was assisted by one trained research assistant who helped in the administration of questionnaires in the sampled schools while completed questionnaires were collected from the respondents on the same day. The few respondents who could not fill the questionnaire on the spot were given opportunity till the next day when the researcher visited their schools to collect completed questionnaire. The administration of the instrument took three (3) working days. This method ensured 100% rate of return of the questionnaire. The research questions were analyzed using frequency count

and percentage while Pearson Product Moment Correlation Coefficient was used to test the hypotheses at 0.05 level of significance.

RESULTS

The results and discussions of data analyses are presented in two parts. The research questions were analyzed descriptively using frequency counts and percentage while the research hypotheses were tested using inferential statistics: Pearson Product Moment Correlation Coefficient (PPMCC) at 0.05 level of significance. The responses on strongly agreed and agreed were classified as agreed, while disagree and strongly disagree were classified as disagreed for easy description. The results are presented in tables 1 – 6.

What is the level of teachers' compliance with professional ethics in secondary schools?

The analysis of data in table 1 and figure 1 indicated that the level of teachers' compliance with professional ethics was high as reflected in the following percentage points: punctuality (68.9%), good communication skill (63.3%), positive human relations (61.1%), effective time management (66.6%), adequate knowledge of subject matter (67.8%) and good dressing habit (81.2%). These were reflected in percentage points of strongly agree and agree responses combined in items 1, 2, 3, 4, 5 and 6.

Table 1
Teachers' Compliance with Professional Ethics (n = 90)

S/N	Items		SA	A	SD	D	Total
1.	All teachers are punctual to schools	F	20	42	25	3	90
		%	22.2	46.7	27.8	3.3	100
2.	All teachers have good communication skills	F	18	39	32	1	90
		%	20.0	43.3	35.6	1.1	100
3.	All teachers demonstrate good human relations	F	17	38	32	3	90
		%	18.9	42.2	35.6	3.3	100
4.	All teachers have good time management	F	22	38	29	1	90
		%	24.4	42.2	32.2	1.1	100
5.	All teachers have sound knowledge of the subject matter	F	19	42	29	0	90
		%	21.1	46.7	32.2	0.0	100
6	All teachers have good dressing habit	F	23	50	17	0	90
		%	25.6	55.6	18.9	0.0	100
Weighted Average		F	19.8	41.5	27.3	1.4	90
		%	22.0	46.1	30.3	1.6	100

Source: Field Work, 2018.

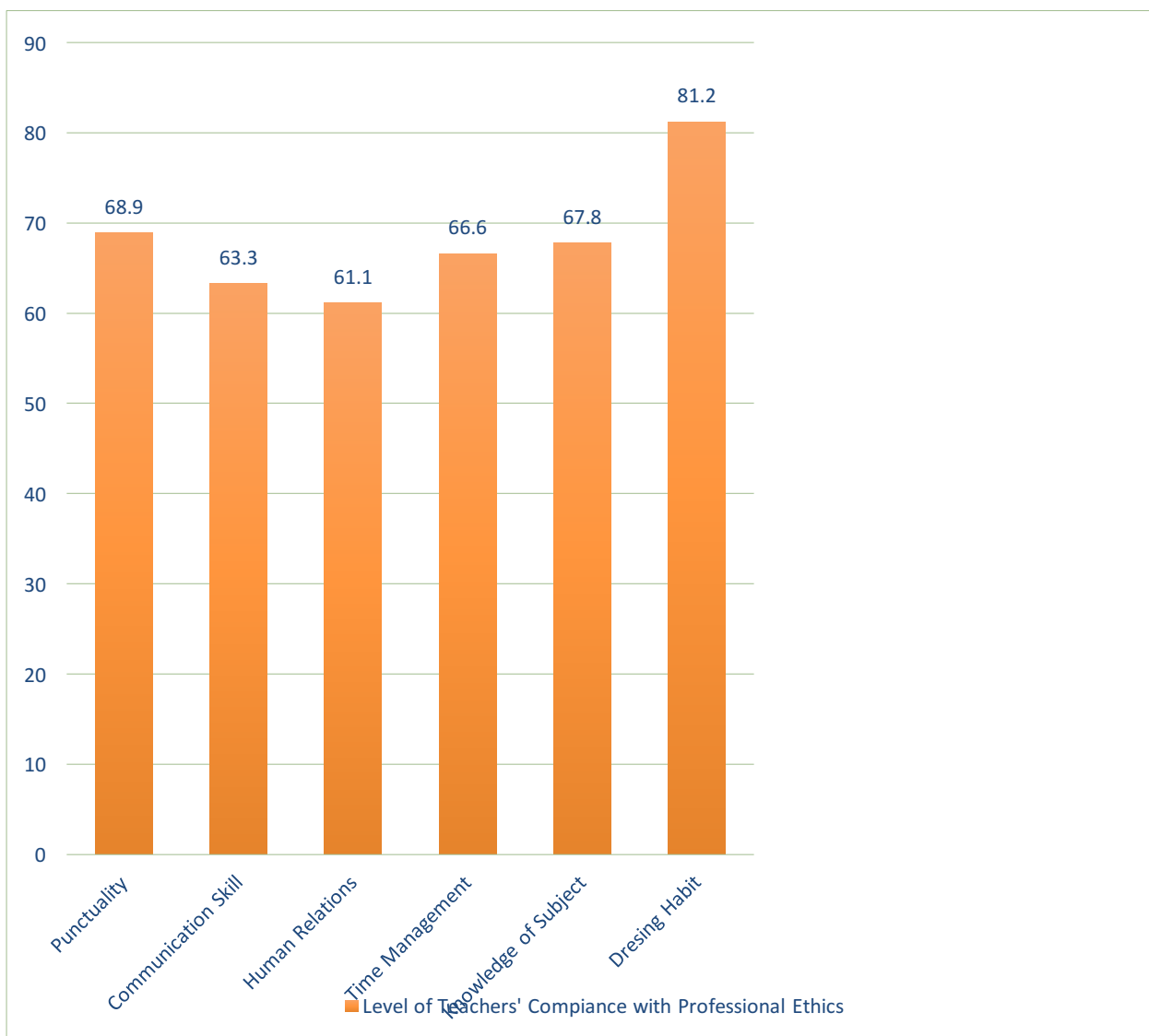


Figure 1: Level of Teachers' Compliance with Professional Ethics

What is the level of teachers' effectiveness in instructional tasks performance?

The analysis of data in table 2 and figure 2 indicated that majority of teachers were effective in instructional tasks performance as reflected in the following percentage points: preparation of lesson notes (68.9%), continuous assessment (73.3%), classroom management (66.7%), students' discipline (81.1%) and participation in committees work (75.6%). These were reflected in percentage points of strongly agree and agree responses combined in items 1, 2, 3, 4, and 5.

Table 2
Teachers' Instructional Tasks Performance (n = 90)

S/N	Items		SA	A	SD	D	Total
1	All teachers prepare their lesson notes adequately and regularly	F	26	36	28	0	90
		%	28.9	40.0	31.1	0.0	100
2	All teachers conduct continuous assessment regularly	F	27	39	21	3	90
		%	30.0	43.3	23.3	3.3	100
3	All teachers maintain good classroom management	F	14	46	30	0	90
		%	15.6	51.1	33.3	0.0	100
4	All teacher support the school management on students' discipline	F	17	56	17	0	90
		%	18.9	62.2	18.9	0.0	100
5	All teachers participate actively in committees work	F	17	51	22	0	90
		%	18.9	56.7	24.4	0.0	100
Weighted Average		F	20.2	45.6	23.6	0.6	90
		%	22.4	50.6	26.4	0.6	100

Source: Field Work, 2018.

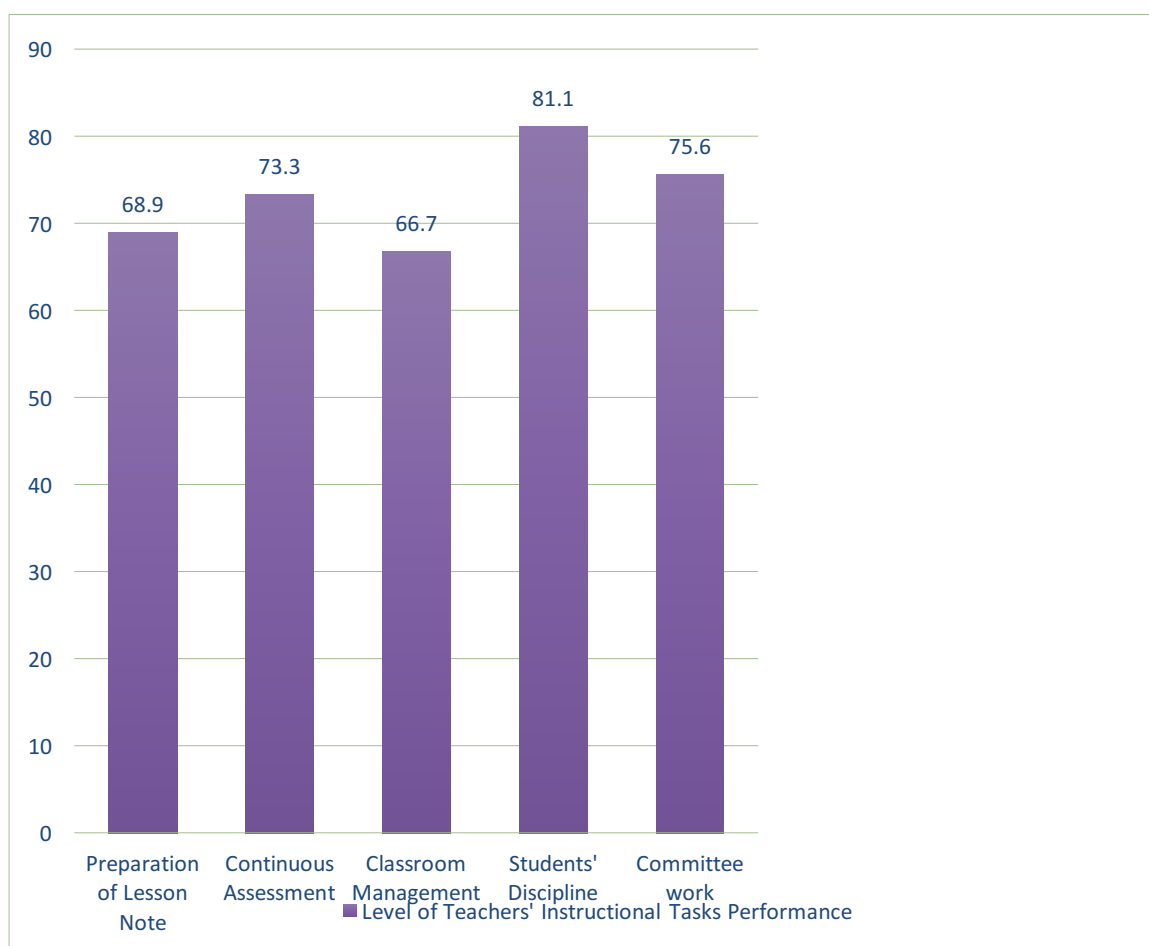


Figure 2: Level of Teachers' Instructional Tasks Performance

What is the level of students' academic performance in WASSCE from 2015-2017?

Data presented in tables 3, showed weighted average and analysis of students' academic performance for three academic sessions (2015 – 2017). The result indicated that 42.52% of the candidates met the baseline standard (obtained five credits and above, including English Language and Mathematics). This implied that the level of students' academic performance is still below average in secondary schools in Owo Local Government Area of Ondo State. A

comparative analysis of results indicated that the best academic performance was recorded in year 2017 (Mean=3.22).

Table 3
Weighted average level of students' performance in WASSCE from 2015 -2017

Academic Session	Candidates with Five (5) Credits including English and Maths (4)	Candidates with Five (5) Credits including English or Maths (3)	Candidates with Five (5) Credits without English and Maths (2)	Candidates with less than Five (5) Credits (1)	Mean Score
2014/2015	388	347	205	73	3.04
2015/2016	535	357	211	111	3.08
2016/2017	480	390	157	46	3.22
No. of candidates	1403	1094	573	230	
Weighted Average (%)	42.52	33.15	17.36	6.97	

Relationship between teachers' professional ethics and teachers' instructional tasks performance in secondary schools.

Hypothesis one was tested by correlating data collected on teachers' professional ethics with teachers' instructional tasks performance in the nine (9) sampled secondary schools, using Pearson Product Moment Correlation Coefficient (PPMCC). The result is presented in table 4 revealed that the calculated r-value (0.694) was greater than the critical-value (0.205) at $p < 0.05$ is significant. Hence, the null hypothesis (H_0) of no significant relationship is rejected while the alternate hypothesis is accepted. This implied that there is a significant relationship between teachers' professional ethics and teachers' instructional tasks performance in secondary schools.

Table 4
Relationship between Teachers' Professional Ethics and Instructional Tasks Performance

Variables	Mean	SD	N	r-cal	r-tab	p	df	Remark
Professional Ethics	1.33	0.473	90					
Instructional Task Performance	1.89	0.672	90	0.694	0.205	0.05	88	<i>Significant</i>

*Significant@ 0.05

Relationship between teachers' instructional tasks and students' academic performance

The result on table 5 indicated that r-cal (0.790) is greater than r-tab (0.205). This implied that there is a significant relationship between teachers' instructional tasks performance and students' academic performance at 0.05 level of significance. Therefore the null hypothesis of no relationship is rejected while the alternate hypothesis is accepted.

Table 5
Relationship between Teachers' Instructional Tasks and Students' Academic Performance

Variables	N	Mean	SD	r-cal	r-tab	p	Df	Remark
Teachers' Instructional Tasks Performance	90	1.89	0.672					
Students' Academic Performance	90	3.91	0.992	0.790	0.205	0.05	88	<i>Significant</i>

*Significant $p < 0.05$

DISCUSSIONS

The result obtained from the analysis of data on research question one in table 1 indicated that teachers complied highly with professional ethics in punctuality, good communication skills, positive human relations, effective time management, adequate knowledge of subject matter and good dressing habit in secondary schools in Owo Local Government Area of Ondo State. This was in consonance with Creamers (1994) that stated that what makes an effective teacher include the professional ethics which are imbibed and demonstrated by teachers in time management, and appropriate teaching techniques. This was also supported by Tyessi, (2015) who claimed that the subjects taught by teachers might not necessarily be students' favorite, yet teachers dressing endeared them as role model to their students.

The findings on research question two in table 2 revealed that professional ethics have positive impact on teachers' instructional tasks performance. Majority of teachers prepared their lesson notes promptly, conduct continuous assessment regularly, maintained good classroom management, ensured students' discipline and participated actively in committees' work. This was in consonance with Babalola (2000) that posited that maintenance of good classroom is an instructional task performed by most school teachers.

Analysis of data on research question three in table 3 showed that the level of students' academic performance is near average. The result indicated that only 42.52% of the candidates met the baseline standard (obtained five credits and above, including English Language and Mathematics). in secondary schools in Owo Local Government Area of Ondo State.

The result obtained on hypothesis one in table 4 indicated that there is a significant relationship between teachers' professional ethics and instructional tasks performance in secondary schools. This finding corroborated by Mohammed, (2006) who found that teachers' professional ethics have significant impact on teachers' instructional tasks performance in secondary schools.

The analysis of data presented in table 5 revealed significant relationship between teachers' instructional tasks and students' academic performance. This implied that teachers' are effective in instructional tasks performance and contributed significantly to students' academic performance in secondary schools. This finding supported the view of Ogunsaju (2006) which indicated that teachers' instructional tasks constitute the leverage point for instructional improvement, teachers' competence and efficiency of the educational system. It could be deduced that teachers made good use of appropriate teaching methods, principles and practices of various techniques to establish, develop and execute the policies, plans and procedures necessary to achieve educational goals in secondary schools.

CONCLUSION

Based on the findings, teachers' professional ethics and instructional tasks have significant influence on students' academic performance. This implied that most teachers complied with professional ethics and demonstrated the desired commitment to instructional task performance in secondary schools.

RECOMMENDATIONS

Based on the findings, the following recommendations were made to improve the level of teachers' compliance with professional ethics and instructional tasks performance for better academic performance of students in secondary schools.

1. Government should provide adequate learning facilities and materials to improve teachers' instructional tasks performance and students' academic performance in secondary schools.
2. Principals should collaborate with other professional bodies to organize intensive and regular seminars/workshops for capacity development of teachers to enhance professional conduct and quality of teaching-learning process in secondary schools.
3. Teachers should demonstrate strong commitment to their profession, imbibe the right attitude to work and give their best in the performance of instructional tasks in order to improve students' academic performance.

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Relationship between Prison Inmates level of Education and Crime Committed in Bauchi State

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ABSTRACT

The study determined in percentages the relationship between prison inmate's level of education and crime committed in terms of burglary, drug-related offences, rape, robbery and weapon-related offence cases in Bauchi State, Nigeria. A survey designed was used for the study. The population of the study consists of 761 (male =753 and female= 8) prison inmates from the four (Azare, Bauchi, Ningi, and Jama'are) prison zones in the State. Proportionate stratified random sampling technique was used to select 247 prison inmates. Property/Violent Crime (PVC) structured interview was used as the instrument for data collection. To ensure the reliability of the information coded from the interviewed, the information collected was subjected to further verification from the prison record officer in each of the 4 zone. Hypotheses were tested at $\alpha = 0.05$ level significance. 98% of the prison inmate that commit burglary case had no post-secondary school certificate; 90% of the prison inmates that commits robbery case were either illiterate or had qualification below undergraduate certificate and there is a significant ($Chi-square = 32.231, p < 0.05$) relationship between prison inmate level of education on robbery and weapons-related offences cases, were among the findings from the study. Recommendation made includes the provision of free and compulsory post-secondary school education by the State government and similar study to be carried out in other states of Nigeria to verify some of the findings from the study.

Keywords: Prison inmate, Level of education, Bauchi State

INTRODUCTION

Prison inmate refers to the person prisoner by law who is currently serving the jail sentence for committing a crime punishable under the Nigerian law. The level of education was used in the study refers to the stage or status at which an individual prisoner is either illiterate, literate or drop out from the school.

Bauchi State is located in the Northeast geopolitical zone of Nigeria. The Northeast geo-political zone comprises six (Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe) States. It is the zone with the highest rate of illiteracy, and school dropout rate in Nigeria.

The aims of education are tied to the nature and ideas of a particular society (Nodding, 2005). Nigerian's philosophy of education is based among others on the development of the individual into a sound and effective citizen (National Policy on Education [FRN], 2004). The national goals which derive from the philosophy include among others the inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian society; the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live and contribute to the development of the society.

However, in spite of effort by the three tiers of government(Local, State and Federal) government effort in educating their citizens the rate of crimes among the youth or school-aged children is at increasing on annual bases(Prison Inmates Record[NPN] , 2017). Halmasson and Lochner, (2012) observed that policies designed to increase educational attainment and improve school quality can significantly reduce crime rates. In his study Lochner (2008) maintained that education should reduce crime. He urged that an individual with high learning ability will benefit more from school, so we may expect a greater reduction in adult crime among smarter youth in response to school-based policies. In contradictory view, Witte and Witt (2001) observed that the roots of crime are diverse. They reported that many social scientists agree that crime is closely related to work, education and poverty.

An increase in educational attainment significantly reduces subsequent violent and property crime yielding sizeable social benefits such that the beneficiaries prefer not to engage in crime (Lochner, 2008). Blue and Collar (as cited in Lochner) observed that criminals often have limited education. If these ascertain documented in literature(Lochner, 2008 ' Blue & Collar as cited in Lochner) are to be verify based on empirical study among the prison inmates level of education in relation to the crime committed, to what extent the outcomes of the study justify the previous documented literature findings by Lochner, (2008) ; Blue & Collar as cited in Lochner.

In view of this, the study determined the relationship between prison inmate's level of education and crime committed in Bauchi State, Nigeria.

Specifically, the study determined in percentages the relationship between prison inmate's level of education and crime committed in terms of

- i. Burglary case.
- ii. Drug-related offences case.
- iii. Rape case.
- iv. Robbery case.
- v. Weapon related offence case.
- vi. Robbery and the weapon-related offence cases.
- vii. Rape and drug-related offences cases.
- viii. on murder and drug-related offence cases.
- ix. on burglary and drug-related offence cases.

The study was guided by the following research questions

What is the relationship between prison inmate's level of education

- i. and burglary case?
- ii. and drug-related offence case?
- iii. and rape case?
- iv. and robbery case?
- v. and weapon-related offence case?
- vi. on robbery and weapon-related offence cases?
- vii. on rape and drug-related offence cases?
- viii. on murder and drug-related offence cases?
- ix. on burglary and drug-related offence cases?

Hypotheses

The following hypotheses were tested at $\alpha = 0.05$ level significance.

H₀₁: There is no significant relationship between prison inmate's level of education on burglary and drug-related offence cases.

H₀₂: There is no significant relationship between prison inmate's level of education on robbery and weapon-related offence cases.

H₀₃: There is no significant relationship between prison inmate's level of education on rape and drug-related offence cases.

H₀₄: There is no significant relationship between prison inmate's level of education on murder and drug-related offence cases.

METHODOLOGY

The study is qualitative in nature. A survey designed was used for the study. The population of the study consists of 761 (*male* =753 and *female*= 8) prison inmates from the four (Azare, Bauchi, Ningi, and Jama'are) prison zones in Bauchi State. The eight females prison inmates were convicted based on murder case and serving their jail terms in Bauchi prison. Prison Inmates related to the murder case in addition to other crimes were jailed at Bauchi prison centre for reason best known by the prison administrators. The 4 prisons zones were located at the various Local Government Areas (LGAS) headquarters.

Proportionate stratified random sampling technique was used to select 247 (*male*= 239 and *female* = 8) prison inmates based on the six (Burglary, Drug-related offence, murder, rape, robbery and weapons-related offences) crime cases under study. Of these six crimes, the first two (Burglary and drug-related offence were regarded as property crime cases while the remaining were violent crime cases.

Table1. A sample of prison inmates and related crime committed as used in the study

Prison centre	Bauchi	Ningi	Jama'are	Azare	Total
Crime type Burglary	23	20	20	20	83
Drug offence	11	10	3	15	39
Rape	20	11	8	8	47
Robbery	20	-	-	-	20
Weapon offence	7	11	7	8	33
Total	106	52	38	51	247

Table 1 above shows the sample from each of the prison centre in Bauchi State.

Property/Violent Crime (PVC) structured interview was used as the instrument for data collection. The PVC interview consists of two (A and B) sections. Section A is on the bio-data of the respondent while section B requires educational level that is, Illiterate, Primary School Certificate(PSC), Secondary School Certificate(SSC), Undergraduate Certificate[National

Certificate in Education, National Diploma or Higher National Diploma] (UGC) or Graduate Certificate[University degree] (GC).

The PVC was validated by Nigerian Prison Officer from Bauchi prison centre. However, based on the expert advice on validation, the biodata was dropped retaining only section B of the PVC. To ensure the reliability of the information coded from the interviewed, the information collected was subjected to further verification from the prison record officer in each of the 4 centres.

A total of 27(*male=22 and female=5*) Long Vocation Training (LVT) students contact III, 2016/2017 offering the course Educational Research Methods and Statistics (EDU: 383) from the Department of Education Foundations, Faculty of Technology Education, Abubakar Tafawa Balewa University, Bauchi were used as research assistants. A total of 27 (6 interviewers and a supervisor for each prison centre) were used for the data collection. The research assistants were the Long Vocation Training (LVT) students 2016/2017 academic session(group v) from the Department of Education Foundations, Faculty of Technology Education, Abubakar Tafawa Balewa University, Bauchi, offering the course Educational Research Methods and Statistics (EDU: 383). Of this, one research assistant is a prison officer who assisted in getting permission from the State Prison Controller (SPC) on conducting and collecting the data from the 4 prison centres in the State. The data they assisted in collecting form their 1st Continuous Assessment Group Assignment on the practical work in EDUC 383. The interview lasted at most three days in each of the centres.

. The data were analyzed using frequency counts, percentages and charts.

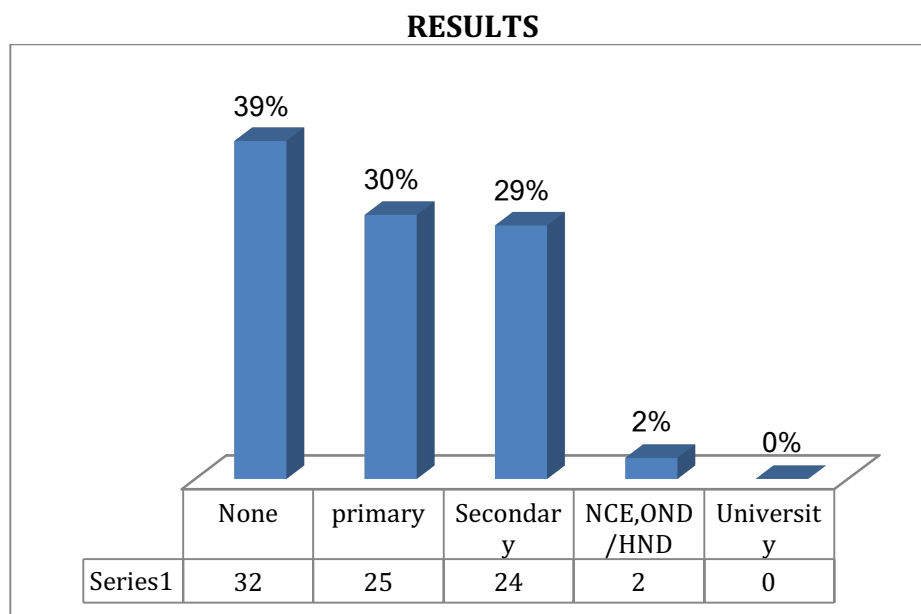


Figure 1. Prison inmates' level of education in percentages on burglary case

Figure 1 above shows in percentages the prison inmates level of education on burglary case.

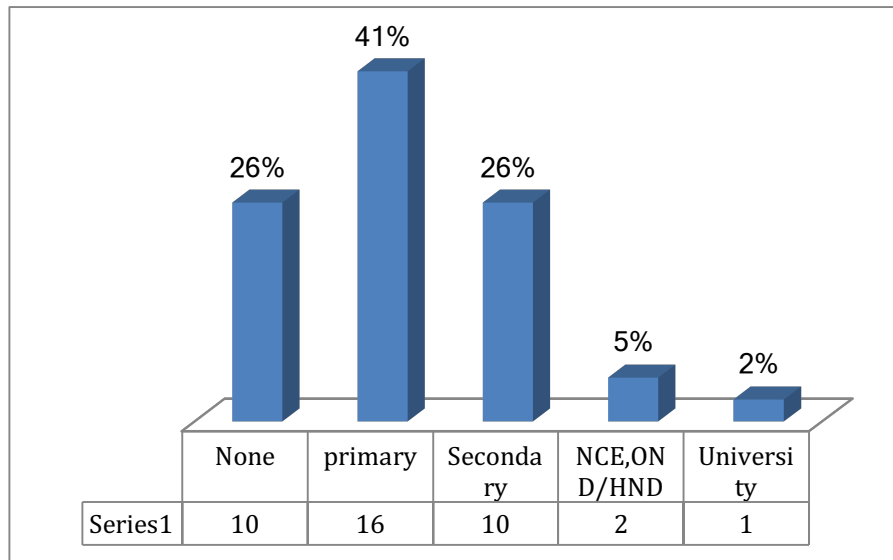


Figure 2. Prison inmates' level of education in percentages on drug-related offences case.

Figure 2 above, shows the prison inmates level of education in percentages on drug-related offence case.

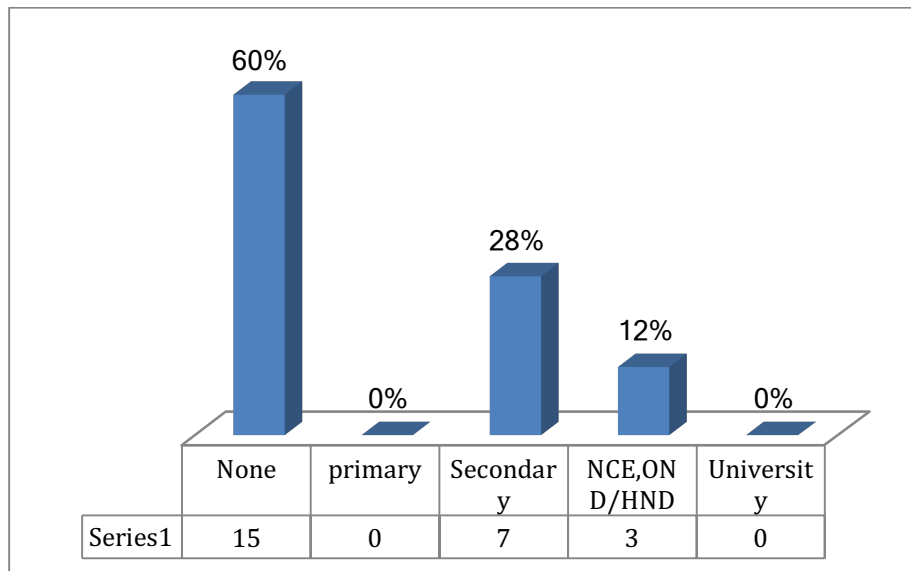


Figure 3. prison inmates' level of education in percentages on murder case

Figure 3 above, shows the prison inmates' level of education in percentages on murder case.

Table2. Prison inmates' level of education in percentages on rape case

Certificate	None	Primary	Secondary	NCE, OND/HND	University	Total
Frequency	21	15	9	2	-	47
Percentage	45	32	19	4	-	100

Table 2 above shows the frequency and percentages of prison inmates level of education on the rape case.

Table3. Prison inmates' level of education in percentages on robbery case

Certificate	None	Primary	Secondary	NCE, OND/HND	University	Total
Frequency	8	2	8	1	1	20
Percentage	40	10	40	5	5	100

Table 3 above shows the frequency and percentages of the prison inmates' level of education on robbery case

Table4. Prison inmates' level of education in percentages on weapons-related offences case

Certificate	None	Primary	Secondary	NCE,OND/HND	University	Total
Frequency	17	11	5	-	-	33
Percentage	52	33	15	-	-	100

Table 4 above shows the frequency and percentages of the prison inmates' level of education on weapons-related offences case

Table5. Computed Chi-Square on the relationship between prison inmates level of education on robbery and weapons-related offences cases

	Value	d	Asymp.sig (2sided)
Pearson Chi-Square	35.231 ^a	4	.000
Likelihood Ratio	40.193	4	.000
Linear by Linear Association	18.103	1	.000
N of valid Case	200		

4 cells (40.0%) have expected count less than 5. The minimum expected count is 2.50

Table 5 above shows the *Chi-Square test* = 35.231, *df*= 4 *p* = 0.000 at $\alpha = 0.05$ level of significance on the relationship between prison inmate's level of education on robbery and weapons-related offences cases.

Table6. Computed Chi-Square on the relationship between prison inmates level of education on rape and drugs -related offences cases.

	Value	d	Asymp.sig (2sided)
Pearson Chi-Square	9.394 ^a	4	.052
Likelihood Ratio	10.237	4	.037
Linear by Linear Association	6.767	1	.009
N of valid Case	200		

4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.00

Table 6 above shows the *Chi-Square test* = 9.394, *df*= 4 *p* = 0.052 at $\alpha = 0.05$ level of significance on the relationship between prison inmate's level of education on rape and drugs -related offences cases.

Table7. Computed Chi-Square on the relationship between prison inmates level of education on murder and drug-related offences cases

	Value	d	Asymp.sig (2sided)
Pearson Chi-Square	59.398 ^a	4	.000
Likelihood Ratio	76.471	4	.000
Linear by Linear Association	2.540	1	.111
N of valid Case	200		

2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.00

Table 7 above shows the *Chi-Square test* = 59.398, *df*= 4 *p* = 0.000 at $\alpha = 0.05$ level of significance on the relationship between prison inmate's level of education on murder and drug-related offences cases.

Table8. Computed Chi-Square on the relationship between prison inmates level of education on burglary and -drug-related offences cases

	Value	d	Asymp.sig (2sided)
Pearson Chi-Square	7.754 ^a	4	.101
Likelihood Ratio	8.593	4	.072
Linear by Linear Association	2.910	1	.088
N of valid Case	200		

4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.00

Table 8 above shows the *Chi-Square test* = 7.754, *df*= 4 *p* = 0.101 at $\alpha = 0.05$ level of significance on the relationship between prison inmates level of education on burglary and -drug-related offences cases.

FINDINGS

- 98% (*Illiterate* = 39%, *PSC* = 30%, *SSC* = 29%) of the prison inmate that commit burglary case had no post SSC.
- 93 % of the inmates that indulged in drug-related offences case had no post SSC.
- 98% (*illiterate* = 45 %, *PSC*= 32%, *SSC* = 19%) of the prison inmates commits rape case had no post SSC.
- 90% (*illiterate* = 0%, *PSC* = 10%, and *SSC* = 40%) of the prison inmates that commits robbery case were either illiterate or had qualification below UGC.
- 100 %(*illiterate* = 52%, *PSC* = 33%, and *SSC* =15%) of the prison inmates that commit weapon -related offences case had no post SSC.
- There is no significant (*Chi-square* = 7.754, *p*>0.05) relationship between prison inmates level of education on burglary and drug-related offences cases.
- There is a significant (*Chi-square* = 32.231, *p* < 0.05) relationship between prison inmate level of education on robbery and weapons-related offences cases.
- Prison inmate's level of education has no significant (*Chi-square* = 9.394, *p*>0.05) relationship on rape and drug-related offences cases.
- There is a significant (*Chi-square* = 59.389, *p*<0.05) relationship between prison inmate's level of education on drug-related offences and murder cases.

DISCUSSION

In discussing the result of the study, limitation on not reporting the bio-data (LGA, state, gender and tribe) of the inmate must be acknowledged.

To achieve objective I from the study, the research question i was answered and the result was shown in figure 1. From the result in figure 1, the highest percentages of the inmates that commit burglary case were illiterate while only 2% of these had UGC. Finding from this revealed that 98% (*Illiterate* = 39%, *PSC* = 30%, *SSC* = 29%) of the inmate that commit burglary case had no post SSC. The finding is in agreement with Research, Planning and Legal Services Branch[RPLSB], (2012) who reports that seven out of every ten inmates had some association with non - traditional high school.

The result from answering research question ii was tabulated in Figure 2 and was used in achieving objective ii from the study. From the result as shown in Figure 2, 93% (*illiterate* = 26%, *PSC* = 41 %, *SSC* = 26%) of the prison inmates that commit drug-related offences case had no post SSC while only 7% (*UGC* = 5 and *GC* = 2 %). Finding from this revealed that 93 % of the inmates that indulged in drug-related offences case had no post SSC.

To achieve objective ii from the study, result in Figure 3 obtained from answering research question iii was used. From the result in Figure 3, the highest (60%) percentages of the prison inmates that commit murder case were illiterate while only 12% had UGC. Finding from this revealed that 88 % (*illiterate* = 60%, *PSC* = 0%, and *SSC* = 28%) of the prison inmates commit murder case. The higher percentage of illiteracy rate (60%) is closely in agreement with James, (2013) who reports that 52 % of male offenders (inmates) and 72% of female offenders have no qualifications.

Result in Table 2 was used in achieving objective iv from the study. From the result (Table 2) the highest (45%) percentage of the prison inmates that commit rape were illiterate while GC holders had 0%. Finding from this revealed that 98% (*illiterate* = 45 %, *PSC*= 32%, *SSC* = 19%) of the prison inmates commits rape case had no post SSC. Finding from this also revealed that the higher the school certificates the least the rape case being committed.

Result in Table 3 was used to achieve objective from the study. From the result in Table3, only 10% (*UGC* =5%, *GC* = 5%) of the prison inmates commits robbery case. Finding from this revealed that 90% (*illiterate* = 0%, *PSC* = 10%, and *SSC* = 40%) of the prison inmates that commits robbery case were either illiterate or had qualification below UGC.

The distribution of prison inmates' responses from the data collected during the interviewed on weapons-related offences case was tabulated in Table4. From the result (Table4) the highest (52%) percentages of the prison inmates that commit weapon-related offences case were illiterate. Finding from the result in Table4 revealed that 100 % (*illiterate* = 52%, *PSC* = 33% and *SSC* =15%) of the prison inmates that commit weapons-related offences case had no post SSC.

To determine the relationship between prison inmates level of education on burglary and drug-related offences cases results in Figure 1 and Figure 2 were used to test the **H₀₁**. The result of testing the **H₀₁** was shown in Table5. From the result in Table5, *Chi-square* = 7.754, *df* = 4, *p*= 0.101, at $\alpha = 0.05$ level of significance was obtained. Although the result in Figure 1 shows that 98% (*illiterate* = 39%, *PSC* = 30%, *SSC* = 29%) of the prison inmate that commit burglary case had no post SSC with only 2% having UGC, and Figure 2 revealed that 93% (*illiterate* = 26%, *PSC* = 41 %, *SSC* = 26%) of the prison inmates that commit drug-related offences case had no post SSC while only 7% (*UGC* = 5 and *GC* = 2 %). However, these differences in percentages on the level of education of prison inmates on burglary and drug-related offences cases were statistically not significant (*Chi-square* = 7.754, *p*>0.05) as shown in Table --. Thus the **H₀₁** was not rejected. Finding from this revealed that there is no significant relationship between prison inmates level of education on burglary and drug-related offences cases.

The result of testing **H₀₂** was shown in Table 6. From the result *Chi-square* = 32.231, *df* = 4, *p*= 0.000, at $\alpha = 0.05$ level of significance. Although,90% (*illiterate* = 40%, *PSC*= 10%, and *SSC* = 40 %) of the prison inmates that committed robbery case were either illiterate or had school certificate below post-secondary school. While 100% (*illiterate* = 52%, *PSC*= 33%% and *SSC* = 15%) of the prison inmates that committed weapon-related offences case were either illiterate or had school certificate below the post-secondary school. But these differences in percentages on the prison inmates level of education on robbery and weapons-related offences cases were statistically significant at *Chi-square* = 32.231, *p* < 0.05 level of significance. Thus the **H₀₂** was rejected. Finding from this revealed that there is a significant relationship between prison inmate level of education on robbery and weapons-related offences cases.

To determine the relationship between prison inmates' level of education on rape and drug-related offences cases, the H_{03} was tested and the result was tabulated in Table 7. From the result in Table 7 $Chi-square = 9.394$, $df = 4$, $p = 0.52$, at $\alpha = 0.05$ level of significance was obtained. Even though, results tabulated in Table 3 on rape and Figure 2 on drug-related offences revealed 98% (illiterate = 45%, PSC = 32%, and SSC = 19%) of the prison inmates that committed rape case, and 93% (illiterate = 26%, PSC = 41%, and SSC = 26%) of the prison inmates that committed drug-related offences case were either illiterate or had school certificate below post-secondary school. However, these differences in percentages on the prison inmates level of education on rape and drug-related offences cases were not statistically significant ($Chi-square = 9.394$, $p > 0.05$). Thus, the H_{03} was not rejected. Finding from this revealed that prison inmate's level of education has no significant relationship between rape and drug-related offences cases.

To achieve objective vi from the study, the H_{04} was tested and the result was shown in Table 8. From the result (Table 8) $Chi-square = 59.389$, $df = 4$, $p = 0.000$, at $\alpha = 0.05$ level of significance was obtained. Although from the result in Figure 2 shows that 93% (illiterate = 26%, PSC = 41%, and SSC = 26%) of the prison inmates that committed drug-related offences case were either illiterate or had school certificate below the post-secondary school. While the result from Figure 3 shows that 88% (illiterate = 60%, PSC = 0%, and SSC = 28%) of the prison inmates commit murder case. However, these differences in percentages on the prison inmates level of education on drugs-related offences and murder cases were statistically significant ($Chi-square = 59.389$, $p < 0.05$). Thus the H_{04} was rejected. Finding from this revealed a significant relationship between prison inmates level of education on drug-related offences and murder cases.

CONCLUSION

The study discussed by determining the relationship between prison inmate's level of education and crime committed in Bauchi State. 247 prison inmates drawn from four prison centres were I took part in the study. Two main categories of crime (property and violent) were studied in relation to the prison inmate's level of education on the crime committed. Of the 247 sample prison inmates, 95% (illiterate = 42%, PSC = 28%, and SSC = 25%) of the prison inmates were either illiterate or had school certificate below post-secondary school qualification. The higher the level of prison inmates level of education the least the crime being committed was among the findings from the study.

RECOMMENDATIONS

- Provision of free and compulsory post-secondary school education by the state government for the teeming population of secondary school leavers to minimize the rate of violent crimes such as robbery and weapons-related offences.
- No child left behind in an early and secondary education campaign to be mounted by the State government.
- Entrepreneurial skills training to be extended to primary and secondary school to cater for those who wish to drop at either primary or secondary school level.
- A similar study to be carried out in other states of Nigeria to verify some of the findings from the study.

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A Practical Guide to Assessment Literacy

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ABSTRACT

In the age of accountability, it is important for educators to understand key principles of assessment practices. Too often terms are used interchangeably. This article reviews core knowledge of assessment literacy as used within educational context. History and definition of assessment terms are provided. Tables provide examples of assessment tools and characteristics of formative and summative assessments.

Key Terms: Assessment, Measurement, Test, Evaluation, Assessment Literacy, Assessment systems, Authentic Assessment, Formative Assessment, Performance-based Assessment, Summative Assessments

INTRODUCTION

As student's advance through the K-12 education system they will have taken an average of 112.3 mandated standardized tests (Strauss, 2015). This number does not include optional tests such as diagnostic test for exceptional students or English learners, district mandated tests, or teacher developed tests. The basic premise for standardized testing, subject-specific knowledge achievement tests or scholastic readiness aptitudes tests, is to provide a method to evaluate student performance on individual state standards. These standardize test only provide a snapshot of a year's worth of instruction, therefore, it is important for educators to know the fundamental differences between measurement, assessment and evaluation as they are used within educational context throughout the year. This core knowledge is referred to as *assessment literacy* and defined as "the ability to create and use valid and reliable assessments as a classroom teacher to facilitate and communicate student learning" (Gareis & Grant, 2015, p. 178)

Historically speaking, standardized testing has been around for a long time used in determining governmental positions in Imperial China to placing new recruits in World War I. The SAT that we know today was developed in 1926, and in 1936 IBM revolutionized the way students take tests also known as the infamous "bubble sheets". In the past couple of decades, two major policies (No Child Left Behind and Common Core State Standards Initiative) were passed that take standardized testing to a new level of "accountability". According to proponents, standardized testing measures student achievement and holds teachers and schools accountable to taxpayers, however, at the same time, opponents argue that standardized testing promotes "teaching to the test" and a decline in students' critical thinking skills. Although standardized testing is attractive because it is a quick way to quantify and compare how students, schools and educators are performing, there are many other ways to capture students' abilities and readiness. Of the many aspects of teaching, "quality classroom assessment plays a critical role in affecting student learning and has a research-based set of best practices", (Frey, 2014, p.3). However, after several centuries of education, the definition of the terms assessment, measurement, test, and evaluation are still being debated and used

interchangeably. Mertler (2003) provides one of the clearest definition and purpose of these terms as they pertain to classroom practice. Simply stated, *assessments* are used to obtain information, collection of data is *measurement*, the instruments used for measurement are *tests*, and *evaluation* is an interpretation. These four terms, their definitions and as they relate within the context of the classroom and assessment literacy, will be the focus of the remaining content of this article.

DEFINITIONS OF KEY TERMS

Assessment

Assessment is thought by many educators as one in the same with evaluation, measurement, and testing because of their similarities, and is used in a variety of ways. Classroom assessments are part of a process of measurement, evaluation and testing tools, and referred to as an *assessment system*. Assessment systems are defined by Mertler (2003) as "all the systematic methods and procedures that are used to obtain information about behaviors and upon which educational decisions are based" (p. 7).

A synonym for assess is to measure, therefore when we assess something, we are measuring it. An example of such a practice is assessing for exceptionalities or verbal and quantitative skills. Assessments are generally used for planning, conducting, and evaluating instruction; diagnosing student difficulties; placing students (grouping based on ability, sequencing of coursework, etc.); providing feedback; and grading and evaluating learning. Assessments are generally tied to an objective, goal, or skill and used for many educational purposes such as student aptitude, motivation, self-concept, and achievement.

Tests

Tests are the catalyst in which assessments are performed and referred to as a collection instrument for accumulating information on student performance for a predetermine set of cognitive skills. They are in fact assessments, however, not all assessments are tests as will be discussed later. Tests are a special form of assessments administered under manufactured circumstances and connected to goals or objectives from which it was designed. A test can be a formal set of questions, or performance task generally administered to groups of students. Tests are given at the end of a lesson, unit, or some point in the year to assess progress of goal attainment.

Measurement

Measurement is defined as "a process involving a structured situation that includes samples of particular characteristics or behaviors that results in a numerical or narrative score" (Mertler, 2003, p. 7) and is generally quantitative in nature. Measurement involves observing an object or condition that includes or excludes criteria from specific measurement scale sets. The four basic measurement scales, discussed briefly below, include nominal measurement, ordinal measurement, interval measurement, and ratio measurement.

Nominal measurement scales have no numerical value and represent categorical descriptive variables. Examples of variables measured on a nominal scale include gender or religious affiliations. Ordinal scales are used to place the measurement variables in order and ranking for example academic grades or the results of a race (1st, 2nd, 3rd places). The third measurement scale, interval, involves the properties of equal intervals representing equal and meaningful differences such as in the case of measuring the distance of a football field. The distance between 10 yards and 40 yards is the same as the distance between 50 yards and 80 yards. A thermometer is an example of a ratio measurement scale. It is like ordinal

measurement with one important distinction – it includes the number zero which allows for a comparison between negative and positive values.

Evaluation

According to Mertler (2003), *evaluation* is “the process of making a *value judgment* about student skills or capabilities. Evaluation goes beyond measurement not only to quantify performance, but also to judge the merits of that performance” (p. 7). Although used interchangeably with measurement, evaluation is different from measurement in regards that evaluation uses the results of measurement and assessments in specific ways to make valued decisions or quantified judgements. Evaluation is what occurs after a measurement or assessment activity is implemented and requires extensive decision making on the part of the educator. Evaluations are generally used to make informed decisions about students, instructors, or academic program effectiveness.

A distinctive characteristic of evaluation is the inherent value placed on results to determine the “worthiness, appropriateness, goodness, validity, legality, etc.” (Kizlik, 2014, para. 6) of the assessment or measurement. To evaluate a situation, a criteria or purpose must be initialized in some valid and reliable way. You can collect measurements, for example the average temperature of the classroom, but this simple measurement does not provide information as to what constitutes an ideal classroom temperature for learning.

Another characteristic of evaluation is its comparative nature. As educators, we are continuously evaluating in comparison to the intended purposes (objective, standard, behavior, progress, etc.) and the obtained results. Student achievement is annually measured and compared to established national norms or state standards.

Kizlik (2014) summarizes the key terms as follows: “we measure distance, we assess learning, and we evaluate results in terms of some set of criteria”, (para. 7). Each method is part of an *assessment system* and should be used comprehensively with other samples of student work both formally and informally.

Context in the Classroom

Assessment systems are used to develop baseline data by educators to communicate performance and are an integral part of effective instruction. Over the past twenty years, there have been major shifts in assessment practices. A primary shift leans toward summative learning as in “assessments *of* learning” (student-centered) whereas “assessments *for* learning” is directed towards data driven instruction (teacher-centered). A third shift implies that “assessment *as* learning” should be student centered through self-reflection and self-regulation (Wang, 2017). Assessments have moved away from using results to compare students with other students to comparing individual performance based on some set criteria, giving students multiple opportunities to demonstrate knowledge, and opportunities to participate in the assessment process.

Figure 1 provides a basic list (not all inclusive) of assessment system tools available to educators. As indicated, there are many tools, and a variety of theoretical approaches to assess student learning depending on purpose.

- “Assessment can be used for learning, to actually increase learning,
- Assessment can be used to improve instruction and allow students to control their own learning,
- Assessments can be designed to mirror the real world with the real world's accompanying realistic expectations and evaluations, and

- Assessments can finally be designed to meaningfully include everyone in today's diverse classrooms". (Frey, 2014).

Assessment Approaches

Traditionally most assessments are paper-pencil tests administered after a unit or lesson to demonstrate mastery of skills and important concepts. According to the American Association for Higher Education (2018), "assessment is most effective when it reflects an understanding of learning as multidimensional, dynamic, contextual, and experiential" (para. b). Assessments should be designed in a fair and equitable manner to address diverse student needs, designed to assess learning outcomes, and provide information that is meaningful and relevant. When choosing an assessment approach, teachers should consider assessment *for*, *as*, and *of* to drive their choices:

- Assessment for learning – used to design and revise instruction and to know where students are "at".
- Assessment as learning- used to help students understand how they learn and have control in their own learning.
- Assessment of learning – used to reach conclusions about how much learning has occurred after instruction. This is the type of assessment most educators are familiar with and what has been most used in the past (Frey, 2014).

When designing assessments, teachers should always take into consideration those approaches that encourage long-term learning and are both engaging and intrinsically meaningful. The focus, according to Earl (2013), is to use assessments "as the vehicle for helping students develop and practice the necessary skills to become critical thinkers who are comfortable with reflection and the critical analysis of their learning" (p. 28). Teachers also must consider if the assessment type will be administered in a group or individual setting, or on a formal or informal basis. Formal group assessments, usually pre-determined by administration and lack spontaneity, may include text and curriculum-embedded tests, commercial criterion and normed tests, rating scales, performance tests, and questionnaires. Performance assessments, standardized norm and criterion-referenced tests, and curriculum-embedded tests are individual formal assessment options. There are several options to assess students and groups informally, which are more spontaneous and less obvious. Examples of this type of assessment includes oral questions, writing samples, portfolios, self-assessments, error analysis, etc. (Table 1)

Anecdotal records	Projects
Achievement test	Portfolios (documentation of progress, showcase)
Aptitude test	Progress chart/reports
Attitude test	Profiles
Checklist	Questioning (Oral)
Class groups	Quizzes
Conference/interviews	Records (behavior, class, conduct, daily, group, student, test)
Daily record	Report cards
Diagnostic testing	Research projects
Demonstrations	Rubric
Documents (homework, seat work, etc.)	Self-reporting
Exams	Simulations
Grades	Speaking
Grade book	Standardized tests (Achievement, Aptitude, and Attitude test)
Hands on testing (Performance)	Teacher made tests
Observation	Writing
Oral presentation	
Process assessment	
Product assessment	

Table 1: Assessment, Evaluation, Measurement tools

Most often, teachers will elect to use one of the four major assessment approaches: summative assessments, formative assessments, performance-based assessments, and authentic assessments. Dixson and Worrell (2016) provide an overview of summative and formative assessment use in the classroom, the purpose for each, and how the four approaches are related (see Table 2). It is important to note that many assessments can be used interchangeably meaning a formative assessment can be designed for use as a summative assessment and summative assessments used as a formative assessment.

Summative Assessments

Summative assessments are used for formally assessing student knowledge and are usually administered at the end of a unit, lesson, or year of study. The data collected from summative assessments indicates progress and achievement in skills, content knowledge, and understanding. Summative assessments are associated most often as a way for state or districts to gauge student learning of content standards and accountability measures (AYP). Since summative assessments are used to evaluate progress and programs after instruction, they do not yield information that is useful for the classroom teachers during instruction to provide for modifications or interventions (Garrison & Ehringhaus, 2013).

Characteristics of Formative and Summative Assessments

<i>Characteristic</i>	<i>Formative Assessment</i>	<i>Summative Assessment</i>
Purpose	To improve teaching and learning To diagnose student difficulties	Evaluation of learning outcomes Placement, promotion decisions
Formality	Usually informal	Usually formal
Timing of administration	Ongoing, before and during instruction	Cumulative, after instruction
Developers	Classroom teachers to test publishers	Classroom teachers to test publishers
Level of stakes	Low-stakes	High-stakes
Psychometric rigor	Low to high	Moderate to High
Types of questions asked	What is working What needs to be improved How can it be improved	Does student understand the material Is the student prepared for next level of activity
Examples	Observations Homework Question and answer sessions Self-evaluations Reflections on performance Curriculum-based measures	Projects Performance assessments Portfolios Papers In-class examinations State and national tests

Table 2: Characteristics of Formative and Summative Assessments

Formative Assessments

Black and Wiliam (2010) define formative assessments as “activities undertaken by teachers—and by their students in assessing themselves— that provide information to be used as feedback to modify teaching and learning activities” (p. 82). Teachers use the feedback from formative assessments to adjust instructional strategies and learning behaviors. The purpose of a formative assessment is to increase student learning and works best when used as an assessment *for* learning rather than an assessment *of* learning. Formative assessments should be used to heavily involve students in their own learning process and thought of in terms of “practice. Formative assessments are traditionally not assigned a grade but used to provide feedback of where improvements or adjustment can be made in the learning process leading up to a final summative assessment. Formative assessment: A basic foundation for teaching and learning (Akpan, Notar, & Padgett, 2012).

If students received a grade every time they initially learned a new concept, the final grade would not accurately reflect learning and lessen confidence and motivation to learn (Garrison & Ehringhaus, 2013).

Performance-based Assessments (PBA)

This type of assessment is considered the oldest form of testing commonly used throughout the 1800s prior to being replaced by multiple choice test items around 1914. Mertler (2003) provides a brief definition of performance-based assessments: assessments that address real life situations. Where multiple choice type assessments identify how well a student knows information (recall, identify, list, match), performance-based assessments show how students can apply their knowledge (classify, compare, analyze, evaluate). Performance-based assessments go beyond measuring lower level thinking skills through application and evaluation. Research findings suggest that performance-based assessments increase students’ vocabulary and writing skills while developing motivation and self-confidence in addition to improving teaching practices (Espinosa, 2015). The typical use for performance-based assessments is to assess skills or ability through the “3 P’s: Performance, portfolios and products” (Madaus, & O’Dwyer, 1999, p. 688).

Authentic Assessment

Performance-based assessments are often thought of as one in the same with authentic assessment, however, not all authentic assessments are considered performance-based assessments. The key difference between performance-based assessments and authentic assessments is that the latter requires “students to perform in ways that are valued outside of the classroom” (Frey, 2014, p. 7)- in simpler terms authentic assessments align with real-world application and higher-order thinking skills. More specifically “Assessment is authentic when the tasks, content, expectations, and evaluation methods of the assessment are similar to the meaningful tasks, content, expectations, and evaluation methods outside the classroom in the real world” (p. 203). Authentic assessments include context that is realistic, performance-based, and cognitively complex. Scoring criteria for authentic assessments are understood and sometimes developed by students either through multiple indicators or portfolios.

Involving Students in the Development of Assessment Criteria

Performance-based assessments and authentic assessments often leads to the involvement of students in developing assessment criteria. One advantage of student involvement is that it can help motivate students to learn (Butler & McMunn, 2011). At the center of any assessment must be the student, and one way to harness the power of assessment is to involve them in the process. Utilizing student-centered assessment practices align with Vygotsky’s (1978) theoretical framework (zone of proximal development) where students develop deeper cognitive understanding by engaging in problem solving and tasks guided by their teacher. Using this approach enables students to draw on their current understanding and construct new knowledge.

Assessment should be thought of in terms of what is *done* with students and not *to* the students. Assessment used as a collaborative endeavor, either teacher-student or student-student, maximizes student engagement, motivation to learn, and creates ownership. According to Chan et al. (2014), teachers who promote student ownership of learning enable them in the following ways:

- Being informed about their learning goals, in terms they can understand, from the very beginning of the teaching and learning process;
- Using accurate assessment information to become confident in themselves as learners;
- Receiving frequent feedback that provides them with specific insights as to how to improve;
- Engaging in regular self-assessment, with standards held constant, so that they can watch themselves grow over time; and
- Actively communicating with their teacher and their families about their achievement status and improvement” (p. 106).

An underlying goal of assessment practices is to promote student ownership of their own learning. This of course will demand a shift in practice moving away from a teacher-centered to a more student-centered classroom environment. In doing so, students will know where they are going, where they currently are, and how to close any gaps in their own learning.

Assessment as Reflection (Self-Assessment)

One approach to developing a student-centered classroom environment is to provide authentic and formative assessments that require students to reflect on their own learning process. Reflective practice is accomplished when students “monitor and evaluate the quality of their thinking and behavior when learning and identify strategies that improve their understanding and skills (Ratminingsih, Artini, & Padmadewi, 2017). Through this metacognitive practice, students are involved in their own learning, they can determine what they know and do not

know, and they are able to identify next steps in their progress (Garrison & Ehringhaus, 2013). The students begin to set higher goals and improve their critical thinking skills. Other benefits of reflective practice are promoting intrinsic motivation and empowering students in their own personal learning.

CONCLUSION

Better understanding of the choices teachers make when testing students can be of great benefit to those concerned with improving the quality of classroom assessment. Today's classroom assessments are multifaceted meaning that they overlap and can be derived from different theoretical frameworks focusing on purpose and consistency with intended goals. A formative assessment can be used to provide feedback to both teachers and students and can also be performance based and authentic. It is important for teachers to know the different types of assessments and their appropriate purposes. Assessments must not be thought of as something done to students but as an important part of instructional practices, student learning tools, and a key to learning in its own right.

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Cooperative Learning: General and Theoretical Background

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ABSTRACT

This paper provides a general theoretical background for cooperative learning which researchers in this area need to understand before carrying out researchers. The concentration is on both providing a general background and discussing the theories that are related to cooperative learning. The general background includes definitions of cooperative learning, history of cooperative learning, principles of cooperative learning, types of cooperative learning, advantages of cooperative learning, the role of teacher in cooperative learning, and the role of students in cooperative learning. The theoretical background includes Social Interdependence Theory, Comprehensible Input Hypothesis, Zone of Proximal Development, behaviourism, cognitivism and constructivism.

INTRODUCTION

Cooperative learning in the 1960s was not in the attention of the scholars as the individualistic and competitive learning were the dominating teaching methods. Nowadays, cooperative learning is a crucial method in the educational field not only in the elementary and secondary schools but also in the universities (Johnson & Johnson, 2008).

Traditional teaching methods make the classes teacher-centred which does not help the students to improve themselves (Yassin & Razak, 2017), and might cause anxiety because the students do not practice language with their peers (Razak, Yassin & Maasum, 2017). However, cooperative learning made the process of learning student-centred and this instructional strategy can be achieved by dividing the students into small groups (Machado & Coimbra, 2015). In cooperative learning each group is responsible for its own learning as well as the learning of all the members of the group in the sense that students can share knowledge with each other and every student can explain what s/he has gained to the other students. Thus, students in each group make discussions with each other in order to complete a task, solve a problem or achieve a specific goal given to them by the instructor.

Cooperative learning does not cancel the role of the teacher because the teacher should be available in order to design the activities, monitor the students and divide them into small groups. Leaving the students alone without guidance might not help them to achieve the desired goals of learning (Kagan 1989). The main goal of cooperative learning is to increase the

level of benefit among all the students through cooperation between the students as those whose level is better than the other students can help their classmates by guiding them to understand the lesson or fulfil the given task (Johnson et al. 1993).

Slavin (1996) argued that dividing the students into teams might not be helpful if there is no task or a goal to be achieved by each group. From his perspective there are two main elements for cooperative learning that cannot be separated from each other which are group team work and team goals.

The aim of teaching reading is to help the students understand the passage which they read and cooperative learning is an effective method in teaching reading skills because students will be able to discuss with the other students the difficulties which they encounter when reading any passage inside the classroom (Meng 2010).

HISTORY OF COOPERATIVE LEARNING

Cooperative Learning has a long history which might be dated back to the first century under the name of peer work. However, the real development appeared many centuries after that especially in the 18th century as schools were opened to teach the students depending on peer learning groups. One of these schools is opened by Joseph Lancaster and Andrew Bell in England (Johnson, Johnson, & Smith, 1991). This school later opened branches in different countries which considered as a landmark for the group work learning especially in the beginning of the 19th century in the United States.

One of the figures that have a great influence on group learning is Colonel Francis Parker. He was the superintendent of public schools in Massachusetts (1875-1880). He advocated the use of group learning and could attract thousands of visitors to observe the use of group learning in the public schools (Campbell 1965, as cited in Johnson et al. 1991).

Another figure that contributed to the development of peer learning is John Dewey (1963) as cited in (Johnson et al. 1991). He used a peer learning method in his project which gained its reputation in the American schools especially at the end of the century (Johnson et al. 1991).

The idea of peer learning entered a new phase in the field of research as some researchers started to compare individualistic, competitive and peer learning and their effect on the students. This effort is attributed to Turner in England and Triplett (1897) in the United States which was followed by similar efforts in the 20th century in Germany by the scholar Mayer and in France by the scholar Ringelmann (Johnson et al. 1998).

The first major study in peer learning and competitive learning was carried out by Miller (1929) and it is considered one of the first studies on cooperation which used a lab. This major work followed by the work of May and Doob's work which was a literature review on competition and peer learning from the beginning until 1937 (Johnson et al. 1998).

The interest in peer learning died out in the 1930s in the United States after its flourishing in the late 19th century and the beginning of the 20th century because the focus was turned into the interpersonal competitive learning. In the 1960s the schools were integrated and there was a need for social integration inside the classroom between the majority and minority students. The only solution from the perspective of the educators at that time was the peer work to help the minority students improve their performance in schools (Olsen & Kagan 1992).

In the 1970s, the researchers started to work on cooperative learning method and improve cooperative learning techniques (Slavin 1991). The beginning was with Elliot Aronson and his associates in the University of Texas Austin, who developed the Jigsaw method. This effort is followed by David Johnson and Roger Johnson in the University of Minnesota who developed the technique Learning Together, and David DeVries, Keith Edwards and Robert Slavin at the University of Johns Hopkins who developed two cooperative learning techniques which are Teams-Games-Tournament and Student Teams-Achievement Division.

The use of cooperative learning before 1970 was limited to colleges and then secondary school teachers paid attention to this and later it was used even in the elementary schools. Only after 1990s the educators once again paid attention to the use of cooperative learning at the college level (Johnson et al. 1998).

COOPERATIVE LEARNING DEFINITIONS

There are many definitions for cooperative learning which are not that different from each other. According to Olesen and Kagan (1992), cooperative learning is a classroom activity in which the exchange of information is socially structured between learners and in which every learner is responsible for his/her understanding for the materials as well as the others' understanding for the materials at the same time. Vermette (1998) defined cooperative learning as a team activity which include students with heterogeneous levels working together to master a body of knowledge. The spirit of the team is positive interdependence as each student is responsible for his/her own understanding and the other students' understanding.

According to Johnson and Johnson (2002), cooperative learning is an instructional method which has some characteristics such as the responsibility of each learner for his understanding as well as the understanding of the whole team. Also, reward should be a part of cooperative learning process so that each learner should maximize his efforts to understand and motivates the other team members to increase their understanding for the success of the team.

The above definitions concentrate on group work giving the individual a dual task; the first one is to understand the materials and the second one is to make sure that the other group members understand the materials.

Other definitions shed light upon the shared goal which the students in cooperative learning should take into consideration and utilise cooperative learning to achieve these goals. Brown (1994) defines cooperative learning as a method in which heterogeneous students work together on materials presented by the teacher in order to achieve a specific task. Moreover, Bramlett (1994) argued that cooperative learning refers to the instructional use of small groups when the students work with one another in order to master academic content of a subject. Also, Smith et al. (2007) stated that learning can be cooperative when the students work together to accomplish specific tasks.

The view of Johnson and Johnson (2002) also focused on the social skills which is one of the principles of cooperative learning. They stated that it is important for the students to believe that every individual is important for the group in order to make the cooperative learning groups cooperative in nature. They added that the students in each group should use the appropriate social skills needed for cooperative learning. This point of view is supported by Johnson et al. (1998) who argued that in cooperative learning the students are divided into groups of four or five students in order to achieve academic content and social skills.

Other definitions focused on the interaction between the learners and the role of cooperative learning to make the process of learning student-centred rather than teacher-centred. Cooperative learning is a learning technique which depends on activities that enhance the student-student interaction (Arendale 2005; Heba & Nouby 2007). Any pair work is essential in cooperative learning as the students can not only encourage each other to maximize up the benefit but also practice the language orally through fruitful communication.

In addition, McCafferty et al. (2004) defined cooperative learning and highlighted the importance of equal opportunities in order to make the process of cooperative learning more effective. McCafferty et al. (2004) viewed cooperative learning as techniques that help the students to work together in an effective way. Cooperative learning is different from group work as students in cooperative learning should have equal opportunities to participate and talk to create the output while in group learning the tasks might be carried out by some students without distributing the tasks to the whole group.

To sum up, Cooperative learning is one of the most effective methods in the process of learning and it has gained its popularity in the field of education and research. Cooperative learning has its own principles as not all the group work can be considered cooperative learning. Cooperative learning aims to make the process of learning student-centred rather than teacher-centred. Positive interdependence is one of the principles of cooperative learning as each group member should be responsible for his own learning and the other group members learning. Moreover, cooperative learning should be goal-oriented as the students should work together to achieve a specific task. Equal opportunities of participation among the students is an essential element in the process of cooperative learning.

TYPES OF COOPERATIVE LEARNING

There are three types of cooperative learning groups as stated by Johnson, Johnson, and Smith (1998). These three types are formal cooperative learning, informal cooperative learning, and cooperative base groups.

Formal Cooperative Learning

This type of cooperative learning extends from one period to several weeks in order to achieve shared goals and complete a specific task or assignment. The teacher can use this to teach any subject or course after setting the goals for the students and explaining the principles of cooperative learning in order to make the cooperative learning method fruitful.

In formal cooperative learning, the groups are formed from 3 to 5 students and they should be heterogeneous and the students can start studying according to the cooperative learning strategy assigned to them by the teacher who shall be there to supervise them (Almuslimi 2016).

Informal Cooperative Learning

This type of cooperative learning lasts from few minutes to a class. Teachers use this type to enhance direct instruction such as presentation, discussion and summarizing. The teacher can ask the students to discuss a question the teacher gives them or to summarize the main points of the lesson. So, it is temporary and does not last for an extended period (Almuslimi 2016).

Base Group Cooperative Learning

This type of cooperative learning might last for one year or more. The participants should show a kind of commitment and they should provide support and encouragement to the other students. This type is also helpful when the learner wants to master a course and complete it

successfully. Almuslimi (2016) argued that base group is helpful for socially isolated learners who are chosen carefully and then divided into groups. According to Almuslimi (2016), this type of cooperative learning is mainly used to improve social skills among the students.

ADVANTAGES OF COOPERATIVE LEARNING

The use of cooperative learning methods in the process of language teaching inside the classroom has many advantages to the students. These advantages include increasing motivation towards learning, lowering the level of anxiety and improving the language skills in addition to the improvement of the social skills and maximizing the level of benefit.

Lowering Anxiety

One of the important advantages is related to the psychological aspects of learning because using cooperative learning techniques inside the classroom helps the students to lower the level of anxiety. There is a difference between asking the student to answer a question from the side of the teacher without any practice and asking the students a question and let them discuss the answer with the other students. When the students work in groups, they will not be confused or anxious as they are going to discuss the answer with the other students to whom they feel attached and there are no barriers can be taken into consideration. The practice between the students will polish the students' skills and make them more self-confident and willing to participate in answering the questions of the teachers which reduces the communication apprehension (Dörnyei 1997; Crandall 1999).

Self-confidence

The interpersonal competition between the students inside the classroom is another source of anxiety. The traditional classes create a kind of competition between the students which raises the level of anxiety and causes communication apprehension among the students. Cooperative learning is considered a remedy for such anxiety because the competition in cooperative learning is intergroup and this makes the students have the sense of belonging to the other members of the group which in turn raises self-confidence among the students. Moreover, the level of anxiety in interpersonal competition followed in the traditional classes becomes high because the aim of each student is to win while in intergroup competition the focus is on success (Johnson & Johnson 1994).

Motivation

One of the principles of cooperative learning is assisting the other members of the group to understand the materials and achieve the shared goals. Every student in cooperative learning method is responsible not only for his/her understanding but also for the understanding of the other members of the group. The support of the students for one another help them to get rid of some demotivating aspects such as shyness and insecure, and the level of motivation increases (Crandall 1999; Dörnyei 1997).

Another point is that in some cooperative learning techniques such as STAD, there is a reward for the winning team. This is considered as an extrinsic motivation for the students to do their best to be the top team (Crandall 1999). Moreover, intrinsic motivation becomes high in cooperative learning especially when the cooperative learning is goal-oriented or focus on problem-solving activities. Also, cooperative learning makes the atmosphere of learning enjoyable which motivates the students to participate inside the classroom and this contributes to the motivation towards learning (Crandall 1999).

Equal Participation

The main goal of cooperative learning is to make each individual strong in the objectives being studied and this cannot be achieved without the participation of all the group members. When the students have a specific responsibility and at the same time the students have to make sure that the other group members have understood the material. This creates an atmosphere of engagement because all the group members have responsibilities which require them to engage and participate. The students in cooperative learning will not be passive participants as they have to benefit one another and share their skills and knowledge with the others which creates a chance for each student to participate and learn (Faryadi, 2007).

Improving Language Skills

When the level of anxiety is low, the self-confidence and motivation become high. Also, the low level of anxiety makes the level of participation inside the classroom high which helps the students to improve their language skills. Cooperative learning depends on interaction which gives the students more opportunities to listen, talk, discuss, and express their opinion which have a positive effect on the language skills (Crandall 1999; Richards & Rodgers 2014).

Cooperative learning improves the communication and speaking skills among the students and it has a positive effect on the academic achievement of the students (Bejarano 1987; Tsay & Brady 2012). Similarly, Jacob et al. (1996) stated that cooperative learning has a great influence on the improvement of the language skills as well as acquiring academic language since the students observe the pronunciation of the other group members and their usage for the language.

Cooperative learning is an effective method in teaching reading skills and it is better than the traditional teaching methods as those who study reading using cooperative learning techniques perform better than the other students who depend on traditional methods of learning (Pan & Wu 2013; Marzban & Alinejad 2014).

Souse (2014) argued that cooperative learning is a fruitful method in teaching reading since it facilitates the process of learning as the students work together and share their understandings which strengthen all the members of the group. What supports this point of view is that the students in the group are heterogeneous which makes the low achievement students interact with the high achievement students. The shared goals, hence, will be achieved by all the students which foster the process of learning among the students (Wang 2007).

In summary, cooperative learning has many advantages that foster the process of learning by improving the learner's reading skills. Thus, cooperative learning helps the students to lower the level of anxiety inside the classroom which has a positive effect on the learner's learning process. It also helps the students gain more confidence in their skills and motivates them to spend more time in reading. Reading skills are improved when cooperative learning is utilised inside the classroom in comparison with the traditional teaching methods.

ROLE OF THE TEACHER

According to (Özsoy & Yildiz 2004) as cited in Almuslimi (2016), the role of the teacher in cooperative learning includes the following:

- a) To determine the objectives of the instruction.
- b) To decide on the group size.
- c) To divide the students into different groups taking into mind the level of the students.
- d) To make a proper arrangement for the class.

- e) To plan the materials used inside the classroom in order to make the process of learning interdependence.
- f) To give each student a role in order to make the process of learning interdependence.
- g) To explain the academic work to the students.
- h) To create positive objectives to make the process of learning interdependence.
- i) To provide evaluation to the students.
- j) To help the groups work cooperatively.
- k) To explain the process of study to the students.
- l) To determine the helpful behaviours for success.
- m) To guide the students in terms of behaviour.
- n) To help the work of the groups.
- o) To gather the students to teach cooperatively.
- p) To finish the session or the lesson.
- q) To evaluate the performance of the students and the groups.

ROLE OF THE STUDENT

The role of the learner in cooperative learning according to Almuslimi (2016) can be one of the following:

- a) Facilitator: he is the responsible for keeping the students on tasks.
- b) Recorder: he is the student who writes the decision of the group and their answers.
- c) Summarizer: he is the students who responsible for summarizing the answers of the students.
- d) Reporter: he is the student who provides the ideas of the group to the other groups.
- e) Time-keeper: he is the student who is responsible for keeping the time of the tasks.
- f) Questioner: he is the student who asks questions.
- g) Praiser: he is the student who is responsible for encouraging the students by using praising words.

THEORIES ABOUT COOPERATIVE LEARNING

There are different theories which researchers can use especially as a theoretical framework or conceptual framework in their researches. This section discusses some theories that are related to cooperative learning.

Social Interdependence Theory

Social interdependence theory is the base theory of cooperative learning. The essence of social interdependence theory is that the achievement of the individual's goal is affected by the others through their actions (Deutsch, 1949; Johnson, 1970). Moreover, social interdependence theory has two strands. The first one is positive which refers to the cooperation between different individuals in order to achieve a shared goal. However, the second one is the negative which refers to the competition as the success of one individual depends on the failure of the others.

According to Johnson and Johnson (2008), the studies showed that cooperative learning outperforms individualistic and competitive learning in hundreds of studies, and resulted in a better psychological health. They added that this because of the distinctive feature of cooperative learning as it is close to theory, research and practice.

The main basic premise of social interdependence theory is interaction which leads to better outcomes for cooperative learning because the others are important for the process of learning (Johnson, 2003; Johnson & Johnson, 2005). To achieve cooperative learning, there are five principles that emerge from social interdependence theory and which cooperative learning

exist. These five principles are (1) positive interdependence, (2) face-to-face promotive interaction, (3) individual accountability and personal responsibility, (4) interpersonal and small group skills, and (5) group processing.

The first principle according to Johnson and Johnson (1980) is positive interdependence who gave a good description for this principle. They said that it means that we have to swim together or sink together. This puts each member of the group in a dual task. The first task is to make sure that the learner him/herself understands the materials properly and the second one is that the learner should make sure that the other members of the group have understood the materials as well. If the learner does not take care of the other members of the group and concentrates on him/herself only, this makes the process of cooperative learning useless. Similarly, if the learner depends on the other members to achieve the goals then there is no benefit for cooperative learning. The term positive interdependence is a label for this dual duty which each member of the group should take into consideration. Moreover, the success of the group comes as a result from the efforts of the whole group who have the duty of sharing ideas with the others to make the success attribution to the whole group. In addition, each member should have the sense that the group will not be successful if any member of the group failed to understand the materials or achieve that task allotted to the group by the teacher.

The second element according to Johnson and Johnson (1989) is face-to-face promotive interaction. Actually, it is promotive interaction but it is preferred to be face to face since it is more effective than any other means of communication. This principle is linked to the first principle as the students' interdependence on one another requires a good communication. The goal of the communication is to exchange ideas, materials or sources with the other members of the groups, to discuss a problem or its solution, to provide materials to the other members of the group, and to give feedback to the others. This kind of interaction promotes the process of learning and makes every individual committed to the other members of the group and to the mutual goal of learning.

The third principle according to Johnson and Johnson (1989) is individual accountability as each person in the group is responsible for a share and he/she has to achieve it in order to contribute to the success of the group. If the students depend on one of the members of the group to do everything, there is no benefit to be achieved by the other members. An important point discussed by Johnson and Johnson (1989) is that the group members should realize who needs assistance, encouragement and support in order to help him/her do his/her share to the success of the group. The eventual aim of cooperative learning is to make every individual stronger and be able to achieve similar tasks alone. This cannot be achieved if the individual is not responsible to the success of the group. Also, students should have individual tasks to test their achievement and whether they have developed their skills or not and the individual scores are counted for the success of the group as it is used in the STAD technique.

The fourth principle of cooperative learning is interpersonal and small group skills. In order to achieve this goal, students should 1) get to know and trust each other, 2) communicate effectively, 3) accept and support each other, and 4) resolve conflict constructively (Johnson 1991; Johnson & F. Johnson 1991). Johnson and Johnson (1986) believe that cooperative learning is important when we want the students learn more effective social skills. The productivity of cooperative depends too much on social skills as communicative skills including requesting, apologizing, and asking for support. Johnson and F. Johnson (1991) highlighted the importance of teaching these skills and stimulating the students to use them as lacking such social skills leads to unproductivity of cooperative learning. In other words, the

success of cooperative learning depends too much on how each member of the group deals with the other members of the same group.

The fifth principle of cooperative learning is group processing which refers to the process in which the learners try to reflect on their work and to what extent they are achieving the goals (Johnson & F. Johnson 1991). Discussion between the members of the group is essential in cooperative learning in order to get feedback from each other and improve their performance. The discussion should lead to decision about what to do to improve the group work or what not to do to avoid mistakes and also to improve the work of the group. Group processing can be achieved in two ways. The first one is group processing between the members of the same group and the second one is whole class group processing through which each group share their experience with the other groups.

These are the five principles that make cooperative learning successful and any group work that lacks these elements might not be considered cooperative learning. The goal of these principles is to contribute to the success of the group and to strengthen the individual at the same time.

Comprehensible Input Hypothesis

According to Krashen's input hypothesis, the process of learning should take into consideration the level of the learners and be a little above the understanding of the students and from which the students can infer meaning Hedge (2000). Krashen gives symbols to illustrate this point and he said that if the level of the student is i , the comprehensible input level should be $i+1$ in which the student can understand the input even if he would not be able to produce the language at this level because it is above his/her level.

Learners always need to understand the materials given to them by the teachers as these materials are considered the basis for the students in order to achieve their goals in the process of language learning as well as in the academic field. Greenfield (2001) stated that students need interaction, simplification and elaboration in order to improve their level and achieve the comprehension required level.

When the students use cooperative learning even when the materials are taken from a website in the Internet, they will have the chance to communicate with each other in order to elaborate or simplify the knowledge and the messages which they receive. The eventual aim of this interaction is to help the students reach to the level of the required comprehension.

Behaviourism

Behaviourism theory started by Piaget in the field of psychology, and after that it is used in the field of education especially by B. F. Skinner. Behaviourism theory is based on three steps which are stimuli, response and reinforcement SRR. First there should be stimuli to the students in order to get responses from them and then reinforcement is provided. There is a series of stimuli and responses which are used to help the students understand and learn (Brown 2007). Roblyer et al. (1997) as cited in Mohaida (2006) argued that the teacher can start with lower level skills and then move to the high level skills gradually. The teacher can list all the skills needed and then start with the low level skills and move step by step to the high level skills.

The process of reading has changed with the passage of time as it has been "changed drastically from a means of communication with divinity and a means for moral development, to reading as behavioural skills, to reading as deep linguistic processing" (Luke 1995: 96). Thus, reading

nowadays is not used for knowledge and moral purposes only because it has become a part and parcel of the educational field especially in first, second and foreign language acquisition which are classified under the field of linguistics.

Giving drills and using cooperative strategies such as STAD to the students involves the students in a together discussion in order to provide the right response or answer which might maximize the benefit to the students since learners can get benefit from each other (Cooper 1995).

Cognitivism

Cognitivism is related to the mental process during the process of learning. The first scholar who supported this theory is (Piaget 1971). His view is that the learner receives information and retains them through learning which depends too much on the learner him/herself according to the needs of the learners. The needs of the learners, therefore, are the basis of acquiring and retaining knowledge. According to Piaget, the stages of learning are not separate from each other as the learners link the knowledge which they receive in different times. There is a build-up of knowledge which accumulates through the different stages of learning.

The cognitive theory focuses on the long-term memory and the short-term memory because the brain classifies knowledge and chooses what to store in the short-term memory and what to store in the long-term memory according to the needs of the learners. Cognitive theory considers learning as complex processing techniques of the skills which the learners need to overcome the limitations of the mind that might hinder the performance of the students. Understanding the cognitive process of learning will be of great asset to the educators to help learners improve their cognitive abilities and transfer knowledge from short-term memory to a complete and full knowledge and this is what the learners need in order to improve their skills (Jordan et al. 2008). They added that cognitive theory is not limited to memory only as there are many processes that happen in the black box in the mind and these processes are the main concern of cognitivism such as perception, attention, sensation, and encoding.

Cognitive view of learning is close to cooperative learning as cooperative learning gives a chance to the learners to revise and build up their knowledge. (Sharan, 1992; Davidson et al., 1992) as cited in (Cooper, 1995) stated that cooperative learning activities which permit the students to build up their discipline knowledge falls into the tenets of cognitivism because it helps the students to build knowledge which is the basis of both cognitivism and cooperative learning.

Constructivism

Jean Piaget (1896-1980) established constructivism theory which refers to the process of building up knowledge which can be achieved individually or by working together (Hein 1991). Hein added that learning is achieved through constructing meaning and meaning cannot be passed from one person to another as it is built upon and linked with the previous knowledge of the person through active interaction and involvement with others and with the environment (Bruner 1973). Socio-constructivism is given by Vygotsky, Piaget's student, who asserts the role of culture and collaborative learning through interaction with the other members of the society in order to generate the individual's own knowledge. Vygotsky's constructivism, known as socio-constructivism, highlights the role of the culture and the social context in the process of learning to form the body of knowledge of each person (Brown 2007).

One of the ways of effective learning is constructivism, and cooperative learning is a method of constructing meaning. Dividing the students into groups will help the students to interact with

each other and this interaction will be of great asset to the students to build a strong knowledge construction. Moreover, active learning is a basic element in language learning and using cooperative will give the students a chance to manipulate the materials and exchange experiences to learn through building meaningful concepts. Cooperative learning, therefore, is a method to help the students interact with each other in order to construct their knowledge.

Zone of Proximal Development

The term Zone of Proximal Development (ZPD) was first introduced by Lev Vygotsky in the 1930s. The notion of ZPD refers to the gap between the actual level of the learner and the level which the learner can reach with the assistance of the others who can be peers or teachers. In ZPD there are lower end and upper end where lower end refers to the development of the learner when s/he depends on him/herself only and upper end refers to the potential development of the learner which can be achieved with the help of the teachers or peers is bounded with the upper level (Rezaee & Azizi 2012).

According to Doolittle (1995), Vygotsky (1978:86) defined ZPD as the difference between the actual development when the learner depends on him/herself and the potential development which happen due to the guidance of adults or “collaboration with more knowledgeable others” who can be peers or teachers. This supports the significance of cooperative learning which depends too much on the interaction between the learners as they provide each other with ideas and knowledge. Cooperative learning gives the students a chance to discover their mistakes and exceed the level of natural learning to the potential level of learning through interaction which can be achieved through using computer assisted cooperative learning. Doolittle (1995) stated that Vygotsky’s ideas about ZPD provide a strong support for the use of the strategies of cooperative learning.

CONCLUSION

Cooperative learning is a method of teaching that makes the process of language learning student-centered rather than teacher-centered. It helps the students to socialize with each other in order to gain experience from the other students. It goes a long with activity theory in the sense that the students become active inside the classroom. This helps the students to improve their language, get high motivation, lower the level of anxiety, and equally participate inside the classroom. Cooperative learning goes a long with a wide range of theories such as behaviorism, cognitivism, constructivism, and comprehensible input. The main aim of cooperative learning is to achieve a specific goal by each group inside the classroom and make every individual strong in the skill or the lesson which they study.

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Designing a family health nursing online course: Weaving accessible pedagogy approaches

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ABSTRACT

We are writing this paper to report on students' and faculty experiences in an online family nursing health course based on 'relational inquiry', that is, a way of thinking that situates individuals within their cultural and social context. Research shows a gap exists between what nursing students are taught and what they later find out nursing really is. In addition, with the increased use of online nursing core courses in the curriculum, facilitating accessibility and engaging the diverse learner in the complex nursing realities can be even more challenging. During the last 5 years, we have been teaching a family health assessment course using Doane and Varcoe's (2015) relational inquiry concepts for Registered Practical Nurses (RPN) bridging to a Bachelor of science in Nursing (BScN). Teaching relational inquiry concepts fully online has been challenging in terms of helping the diverse learner access and navigate the complex nursing workplace realities and form a virtual relationship with self, peers, faculty, and the online environment. Through the use of families' who are situated in diverse culture and context, relational inquiry acknowledges nurses' workplace realities and then offers students ways to navigate this complexity. Thus, the purpose of this paper is to describe four accessible pedagogy approaches we included in our online course (e.g., creating a video or transcript; posting or replying to an article; joining a synchronized discussion; and participating in a non-synchronized discussion) and report students' and faculty experiences from a relational inquiry lens.

Key words – relational inquiry; family; online course; teaching learning strategies; relational; reflection, storytelling, accessible pedagogy approaches

We are writing this paper to report on students' and faculty experiences in an online family nursing health course based on 'relational inquiry', that is, a way of thinking that situates individuals within their cultural and social context. Research shows a gap exists between what nursing students are taught and what they later find out nursing really is. For example, several organizations recently highlighted the need to include awareness of First Nation People of Canada experiences with healthcare in nursing curricular (Aboriginal Nurses Association of Canada, Canadian Association of Schools of Nursing, Canadian Nurses' Association, 2009; Truth and Reconciliation Commission of Canada, 2017). In addition, several nursing educators calls for the increase awareness of the health care challenges, barriers and opportunities nurses and family with disabilities are experiencing (Marks,2007; Moore, 2004). However, with the increased use of online nursing core courses in the curriculum, facilitating accessibility and engaging the diverse learner in these complex

social nursing realities can be even more challenging. Through the use of storytelling of families' culture and context, relational inquiry acknowledges nurses' workplace realities and then offers students ways to navigate this complexity. Thus, relational inquiry associated with this course is not only an approach that mediates the content and substance around family nursing, but also mediates how the students and faculty relate to self, others in an inclusive online environment. The purpose of this paper is to describe four teaching-learning accessible pedagogy approaches that we included in our online course (e.g., creating a video or transcript; posting or replying to an article; joining a synchronized discussion; and participating in a non-synchronized discussion) and report students' and faculty experiences.

While many students belong to the millennial generation, presumed to have more proficiency with the technology aspect of online courses than faculty, nursing students often cannot access parts of the teaching and learning process. Pedagogy accessibility is more than accessing the technology in the provision of patient care and teaching and learning (Fetter, 2009). For example, Nagle and Clarke, (2004) ascertained that nurses who recently completed their education, received little preparation on how to express their ideas using diverse technology. They argued that despite educators using PowerPoints, Blackboard and WebCT technology during lessons, students often perceived that they were passive learners and not always engaged with the material. Topkaya and Kaya (2014) urge nursing educators to provide students with more active and accessible learning experiences when using technology in their courses to improve nurses' experiences beyond the classroom boundaries. With an increased use of online nursing core courses in the curriculum, faculty are therefore encouraged to engage in ongoing reflection regarding online teaching learning strategies for diverse learners, ensuring there is transparency with minimal digital divide (Delgaty, Fisher, and Thomson, 2017; Wong, Greenhalgh, and Pawson, 2010). Digital divide is identified as the gap between students that have access to modern technology and those students that have restricted access to this technology. Several authors linked the digital divide to a silent increase in students' workload while enrolling in online courses (Louise, Sylvester, & Johnstone, 2017) .

During the past 5 years, we have been teaching a family health assessment course for Registered Practical Nurses (RPN) bridging to a Bachelor of science in Nursing (BScN). Nursing students in our bridge program have a Practical Nursing (PN) diploma, a minimum cumulative average of 75%, and with or without RPN work experience. Students (n=120) enroll in two semesters in our community college and if successful, they move to the university for another two more years to get their Bachelor of Science in Nursing (BSCN). Specifically, the family health assessment course integrates Doane and Varcoe's (2015) relational inquiry (RI) concepts and is taught in the 2nd semester of the Bridge program.

Relational inquiry (RI) is an approach which considers the relationship between and among participants. Thru the use of the skill of reflexivity a form of self and other awareness through diverse lenses, Relational inquiry allows the student to experience situations that are familiar as well as uncertain. When the student experiences the diverse patient and nurses in a clinical environment, certain discomforts may occur, prompting the student to actively ask questions and engage in the process of inquiry (Doane & Varcoe, 2015). Relational inquiry involves bringing a relational awareness to our work as nurses (Doane & Varcoe, 2015). It is grounded in the assumption that "people are relational beings who are situated and constituted through social, cultural, political and historical communities" (Doane and Varcoe 2015, p.4). The popularity of an RI perspective is that it does not adhere to a specific philosophical underpinning or nursing way of knowing (Spadoni & Sevean, 2016); rather is oriented toward

the question of how to nurse within the complexities and the realities of the current nursing practice workplace.

Teaching RI concepts fully online is challenging in terms of helping students access a safe virtual relationship with self, peers, faculty, and the online environment to share challenging stories. Thus, we used four accessible pedagogical approaches including: creating a video or transcript; posting or replying to an article; joining a synchronized discussion; and participating in a non-synchronized discussion. It is important to note that we are associating RI with this course as not only an approach that mediates the content and substance around family nursing, but also mediates how students and faculty who are situated in different culture and context relate to one another online. Using faculty personal experiences and reflecting on the end of year Students Feedback Questionnaires (SFQ) report, the purpose of this paper is to describe and critique these four teaching-learning strategies. A more detailed reflection will be provided for one of these activities, specifically, the snowball discussion.

ONLINE TEACHING STRATEGIES TO ENGAGE STUDENTS WITH RELATIONAL INQUIRY

As our nursing students are registered practical nurses (RPNs) and have some experiences with nursing; one of the pedagogical challenges for us, is creating a safe dialogue in an online environment that facilitate accessibility and invites students to actively engage and weave RI concepts such as social, cultural, political and historical contexts of nursing practice. Promoting active learning; considering diverse student learning styles; as well as including various forms of feedback for students, are essential components of online teaching and learning (Levey, 2018; Topkaya & Kaya, 2014).

Subsequently, we use four accessible online pedagogy approaches to engage students:

1. Create a video. For example, during select weeks, we invite students to apply relational inquiry strategies and respond to a complex nursing situation and create a video (or transcript), ensuring specific RI concepts are integrated into their role play or stories.
2. Post and reply – Students post an article that stood out to them (e.g., in the news this week) or reply to a peer on the article their peer posted.
3. Join a synchronized discussion (e.g. similar to skype or a video conferencing that we call “bb collaborate”)
4. Participate in a non-synchronized discussion (e.g. snowball discussion) in a small group (See Appendix A for details on evaluation).

Strategy 1: Creating videos (or transcripts) with relational inquiry concepts

Relational Inquiry (RI) invites readers to reflect about how context is embodied by people and think about how nurses understand the body. The western world sees the separation between the body and the mind (also termed “Cartesian view”) and recognizes that the body cannot be “a knower” (Doane & Varcoe, 2015 p.149) and thus leads one to approach people as separate from their world. However, RI describes embodiment as the inseparability between mind, body and spirit (also termed “pragmatic view”). Thus, a client’s emotions and feelings are as important as their physical signs and symptoms and “each time a nurse interacts with a person, he or she is engaged with the whole person and their life experiences as they are embodied in that person” (p. 150). To practice this pragmatic view, RI invites readers to be “in synch” (also called in tuned or “consciously participate”) (p.83) with self, others, and the environment. This perspective invites learners to practice skills reflexively by being made aware of one’s body movement, sounds, emotions, and reactions to self and places. To practice this skill of reflexivity and being in synch in our online course, students are invited to create a video and watch themselves. First, they develop a scenario whereby they have to assess a client as a whole person, use their smartphone to video record their roleplay of the scenario (or create a

transcript) and then watch their video (or review their transcript) and write a 200 word reflection. Students are given the freedom to include a peer or a friend to be the client in their roleplay.

Asking students to create a video (e.g. in the form of a role play or storytelling) and applying the RI “being in synch”, helps both to engage students with the course content (Morisson, 2012), as well as relate to each other. There are two elements to this activity. Initially, students are shown a tutorial on how to make and upload a video. As online faculty teaching, we have found that it is important at the beginning of the course to provide information to students about the purpose of the videos and transcripts as well as the technical aspect of creating and uploading a video. Although for the majority of students the creativity level in students’ videos was outstanding, as many chose to share their video with the class (e.g., all students chose to videotape their roleplay in our simulated lab and use costumes to make the scenarios look real; some also created a digital story with subtitles and background sound), a limited group of students discussed the increased amount of time it took them to coordinate making the video with their peers. Furthermore, some informal feedback from students, during the first few weeks of the term, indicates that they are concerned about such aspects as not knowing how to make a video; the large amount of time anticipated to make the video; as well as the relevancy of videos and transcripts to this course. Considering diverse learning styles, in addition to role playing through a video, students have the option to choose to complete additional videos, transcripts or voice recordings. As these video links are posted in our discussion forum, they are only available for students in the course to review and use as feedback for their learning regarding specific course concepts. We have also found it beneficial that students receive some sort of mark or grading, for the completion of this activity.

Strategy 2: Post and Reply to current in the news related to relational inquiry

Reflexivity is central to RI as it involves combinations of observation, critical scrutiny (asking why we do certain things) and conscious participation. In another word it involves paying attention to our environments and the use of language and labels. Engaging with the daily news can be a strategy to help students use the skill of reflexivity. In particular, inviting students to see how, why and what language is used in the daily newspapers to describe a particular family experiences with health and illness. Using newspaper and news reports have been demonstrated not only to enhance skills in reading, writing, listening, and speaking, but also raise students’ social consciousness (Gardner & Sullivan, 2004; Semiu, 2010; Wilbur, 2013). Students are required to find two articles (e.g. newspaper, radio, etc.) during separate weeks, and in a one paragraph discussion, link it to the RI concepts taught the week that it is posted. They also post 2 replies to other students’ postings during separate weeks. Although students also receive a participation mark from faculty upon completion of this activity, they are not given any formal evaluation from faculty related to the content or application of their post. However, other students’ replies to students’ posts may be considered a type of informal feedback from their peers. Additionally, it was observed that certain posts had more replies from students than others. For example, students posting interesting articles from the daily news, such as the struggles of the aboriginal/first nation community in Canada, often received several peers reply. Students receiving feedback in the form of a reply from their peers, help create better relationships between and among students in this online course, creating a community of learners (Morisson, 2012). Through informal discussion, students have shared with faculty that this participation activity is not as stressful and less time consuming to complete, in comparison to the video posts however, many students wanted to have faculty feedback on their effort. We have also observed during certain weeks (e.g. tests in our course or others) that fewer students post articles. It is recommended that students plan their weeks

ahead for posting replies, ensuring they are flexible if needed to post a reply on alternate weeks, due to lack of posts on some weeks.

Strategy 3: Synchronized small group discussions

Helping students *consciously participate* in their everyday practice enable nursing students to more clearly see what's happening in their realities and make choices on how they will relate to self, others and the environments. For example, RI invite nursing students to listen to how the circumstances of individuals lives influence the choices they make and the choices available to them. Also, RI invites nurses to be mindful of how we tend to categorize people. While categorizing patient on the basic of acuity can be helpful in triaging care, categorizing can also strip the identity of a patient (Russell, 2012). Another example of the danger of categorizing is when people are labeled as *disable*. Definitions of *disability* vary: the medical model defines it as a *dis-ability*—the result of a physical condition intrinsic to the individual—whereas the social model identifies the person as being disabled by society. In this context, the impairment itself is not the problem; rather it is the environment that needs to be modified to support the person.¹⁰⁻¹²

We use an award-winning film, *Sounds of Fury* (Aronson, 2000), about a family with disabilities and secrets in families (Imber-Black, 2014) to engage students in a synchronized (live) discussion how through the skill of reflexivity they become aware of the categorizing and their consequences on the family when interacting with healthcare providers.

Several authors ascertain the value of combining synchronized and non-synchronized discussion in online courses to support inclusion and students' engagements (Huang, Lin, & Huang, 2012). In synchronized discussions, all participants are speaking together at the same timeline while in the non-synchronized format students can post, or reply at different times. The latter allows time to reflect and form a thoughtful response while reviewing the readings (Harris, Mishra, & Koehler, 2009). In our course, faculty randomly assign students in small group synchronized discussions that are held twice during the semester inviting students to be aware of the effects of healthcare providers labelling/categorizing family. Students receive a participation mark by attending the session on time and actively participating in the discussion. Informal feedback from students has been positive, with students citing that they find the synchronized opportunity to interact with peers and faculty valuable. Students also like the flexibility of this strategy as they may participate from any location, providing they have a strong internet connection. In fact, some students have indicated that an additional online synchronized discussion with faculty and peers would be beneficial to their learning as some felt there was not sufficient time to include all students in the discussion.

Strategy 4: Non-synchronized Snowball Discussion

Relational inquiry invites us to *consciously participate* by recognizing the meaning (they call it the **hermeneutic lens**) and the power differences (**critical lens**) that plays out in people life circumstances during health and illness experiences (Doane & Varcoe, 2015, p. 81). In order to facilitate students' engagement in RI lenses, students were randomly assigned to small group. The classes (n-30 x 4 sections= n-120) are randomly assigned by the computer for our snowball discussion in small groups of 5-7 students. Not only do we use these groupings for the snowball discussion, but we also use them for the synchronized discussions, thus, further providing opportunities for students to get familiar with each other and connect with their group in a safe environment. We feel that creating small groups to answer the snowball discussion support a safe environment for students to collaborate as opposed to posing the question to the entire class (it is easier to reply to 5 than 60 students). Some authors advocate using more group collaboration activities to improve critical thinking and problem solving

(McKeachie et al., 2000). In their small group students are asked to respond to a scenario and explore it thru the hermeneutic and critical lenses, just like they might play with a new camera. For example, week 1 we ask students about a client visiting the emergency room who was identified by healthcare providers as homeless. We asked students to reflect on the scenario and describe what comes into mind if they frame the picture of the client from a critical lens? In this snowball discussion, the first student answers the question and sets the stage in his/her response for the rest of the group. Each student thereafter, responds to the previous post(s) and adds a new answer idea to the question, thereby at the end we get a rich response that integrates various aspects of how RI lenses help nursing students consciously participate and see the whole person. This snowball discussion is a dominating weekly online strategy we use to engage students in an ongoing small group discussion and thus faculty give written feedback (25% of total course grade) to each student's snowball discussion posting (See Appendix A for a detailed evaluation for week 1). Each new snowball discussion story starts on the Monday morning and ends Friday (See appendix B).

This online snowball discussion strategy is grounded in the Think-Pair-Share (TPS) classroom discussion strategy (Lyman, 1981). Think-Pair-Share is a collaborative learning strategy in which students work together to solve a problem or answer a question about an assigned reading. This technique requires students to (1) **think** individually about a topic or answer to a question; and (2) **share** ideas with classmates (Bounds, 2013). McCall, Holly, and Rambaldi (2006) argued that the Think-Pair-Share is an equity pedagogical best practice because it provides students with (a) think time, a period to reflect and compose their answer, (b) behavioral rehearsal time, a period to practice stating their thoughts with a classmate, and (c) safe options including sharing the thoughts of a learning partner. The research on Think-Pair-Share is compelling in that it encourages increased student participation, and higher levels of student critical thinking and questioning skills (McCall, Holly, & Rambaldi 2006).

STUDENTS' RESPONSES TO SNOWBALL ASSIGNMENT: FACULTY'S PERSPECTIVES

All students engaged within the appropriate timeframe for the snowball discussion posting promptly. However, we have received some anecdotal feedback from students who explained that some group members always posted first or some posted later in the week and created an uneven distribution of time to reply during that week.

We are providing a more detailed reflection about a sample of a small group of 5 students' responses in relation to the evaluation grid (see Appendix A) including, how students reply to each other and add new information; answer the question; include literature; and connect ideas to their readings and additional literature, in the context of relational inquiry. Faculty have obtained permission by students to share their ideas. By using the evaluation grid headings, we grade the assignment.

The first criteria in the evaluation grid asks students to reply to their peer by adding new ideas/information. We find that the skill of adding and replying is confusing to some students. Almost all students used words such as "I agree"; "that's so interesting" in their reply. Many students interpreted the reply to repeat what was said by the previous student. For example, within the framework of a 300-word response, many of the students echoed the students' previous ideas using between 80-100 words. For example, student 2 replied by repeating the previous post as followed:

"I agree that the relational inquiry "Strategy 1: Relate to What is" applies to this scenario as this "hard spot" had the emergency room nurse really neglecting the patient when she labeled him (critical lens). I also agree with your idea of the important of being conscious and trying to put ourselves in patient situation

(hermeneutic lens because understanding patients; meaning) and asking if I was the patient would I want me as my nurse. You really raised an interesting point."

However, despite several students repeating previous responses, there is a group of students that replied by challenging and critiquing the previous post. For example, student 4 started her response by saying

"Thanks for your reply you raised good points and I liked the example of the chipped cup but to be honest I felt you were citing the entire page and you really did not add to the previous two students' ideas within relational inquiry strategies. Maybe it is not entirely your fault because many of Doane and Varcoe strategies overlap. For example, the first post spoke about being conscious feeling empathetic to patient, the 2nd highlighted eliciting colleagues support and you are focusing on responding with compassion (it is part of the 5C discussed by previous student) but you did not clarify how? What should we say that is compassionate and address the bias; can nurses always be compassionate when we are tired and overworked (my critical lens)"

Similarly, student 5 critiqued and challenged the previous student in her reply. For example,

"You have made great and interesting points. I liked how you reviewed all the students posts so far and moved away from focusing on how the nurse was blaming and judging the patient (critical lens). You also stated that it does not show a professional level of client centered care. Yet we must recognize the wrong doing of a nurse (maybe this is more a critique to Doane and Varcoe)."

Thus, both Student 4 and 5, not only critiqued the previous student, but also replied to Doane and Varcoe (2015), arguing that many of their relational inquiry strategies were overlapping and nurses sometimes are in powerless positions to do anything.

Although asking students to recognize RI lenses (e.g., hermeneutic/meaning and power differences) in an online course with 120 students is challenging, this snowball discussion post and reply teaching strategy creates opportunities for students to apply RI lenses and consciously participate. Yet, the majority of students experienced difficulty engaging in recognizing the lenses, particularly the critical lens, and tended to only describe. Many students used direct quotes from the text in such short discussion response. For example, student 3 used several direct quotes and student 4 critiqued them saying

"Thanks for your reply you raised good points and I liked the example of the chipped cup but to be honest I felt you were citing the entire page"

DISCUSSION

By using stories of diverse families' culture and context, relational inquiry acknowledges nurses' workplace realities, then offers students ways to navigate this complexity as well as offers faculty ways to share teaching and learning experiences with others. Thus, Relational Inquiry associated with this course is not only an approach that mediates family nursing content, but also mediates how the students and faculty related to self, others in the online environments. Thus, the purpose of this paper is not only to describe four accessible pedagogy approaches we included in our online course but also report students' and faculty experiences from a RI perspective.

In this paper, we share four accessible pedagogy approaches (e.g., Create a video, Post and reply; Join a synchronized discussion; Participate in a non-synchronized discussion) that we integrate in our online family health course to engage the diverse learner. These four strategies highlight key themes around strengths and challenges related to teaching and learning online

such: giving diverse forms of feedback and workload. These four strategies allow students to engage in small group circles. We feel that creating small groups facilitate accessibility and support a safe environment for students to collaborate, rather than having to pose questions to the entire class (it is easier to reply to 5 than 60 students). Some authors advocate using more small group activities in online courses to improve critical thinking, and problem solving (McKeachie et al. ,2000). The integration of these four online inclusive pedagogy approaches allows students to experience how to relate to others when giving and receiving feedback (Levey, 2018; Simon et al. (2007). For example, the synchronized discussions are conducted in smaller groups and the engagement with students and faculty is a form of immediate feedback. However, with other pedagogy approaches, including creating a video, post and reply, immediate feedback from faculty is not formally given. Rather, for the posts and reply, students are asked to give their peer feedback in the reply section of this assignment. Despite this, not all students receive a reply from their peers to their post because students are given choices to which they want to reply. Furthermore, faculty do not monitor each student's appropriate post and reply but do provide a detailed formal evaluation on the snowball discussion (Appendix A).

Using the skill of reflexivity and paying attention to “what you are doing/feeling/thinking” from a critical lens (Doane & Varcoe, 2015, p. 83) we use RI to also consider whether it is pedagogically ethical to ask students to do an assignment without faculty reviewing and monitoring the content. Should feedback be re conceptualized in online courses? Nursing educators teaching clinical skills are aware that giving students feedback (also called debriefing) is paramount to learning. Yet asking students to do an assignment and invest time and effort with no response from faculty, other than providing a participation mark, may be somehow unfair. At the same time, with the increased number of students in our online nursing core courses, how can faculty feedback be provided online? Spadoni and Sevean (2015) remind us as nurse educators to re-direct our attention from “content” to the “ontology of the student (his or her own way of being in the world)” (p.22). They emphasize Doane and Varcoe's value within relational inquiry of attending to the spirit and invite the learner to tell their stories. For Spadoni and Sevean (2015) faculty feedback on everything the student say or do not say is not important but rather creating a safe space for students to tell their stories and speak about their experiences, and hunches to their daily life.

In this paper we describe how through four pedagogy approaches we facilitated students' accessibility and engagement when weaving RI lenses (critical and hermeneutic). A challenge we faced is navigating the thin line between offering diverse assignments and workload. For example, although several authors highlight the advantages of students' making videos for their learning (Morisson, 2012), many students had challenges. Majority of students expressed satisfaction when using the video, yet small number of students found the video to be time consuming not only because of the technical challenges or having to coordinate with other students, but also because some students do not feel comfortable being in front of a camera. In the course evaluation, several students alluded to the increase workload in relation to these 4 approaches. In particularly, students felt they “worked hard” but did not get feedback.

Kember (2006) conceptualized the workload in his qualitative study as a silent and sometime very complex, influenced by emotion, ethics course content, difficulty, type of assessment, and the nature of the teacher–student and student–student relationship.

Students' workload in online courses has been recently at the fore front. In the United States and Canada, free access to the Massive Open Online Courses (MOOC) system has increased dramatically, with the intention of providing elite college instruction to anyone with an internet connection (Liyanagunawardena, 2015). However, while MOOC enrolls millions of

students around the world, a recent independent review reported that most students never start a single assignment, and very few complete these courses (Zhenghau, 2015). As early as 2014, a piece in *The New Yorker* (Konnikova, 2014) illustrated that there has been an increase in online private tutorials (for example, EdX, Udacity), clearly exposing students' struggles in online courses and the need for additional support. Although limited, there is some discussion in the existing literature regarding student workload in the context of interaction time as well as time on task (Phillips, Schumacher & Arif, 2016). Indeed, no two students will take the same amount of time on any given task, and therefore time on task guidelines were intended for the average student (McLain, 2005). Kember (2006) emphasizes that time is only one factor in understanding student workload.

Student workload can also be conceptualized using the cognitive load theory. Literature on the cognitive load theory and online course design regarding students' cognitive loads is replete (Chen, Dore, Grierson, Hatala, & Norman, 2014). We argue that cognitive load constitutes an integral part of students' silent workload. This includes intrinsic cognitive load—that is, the idea that all instruction has an inherent difficulty associated with it.

For example, a nursing practicum course necessitates medication calculations, a family health course requires connections to ethics and abstract concepts. While intrinsic cognitive load may not be altered, or eased by the instructor, extrinsic cognitive load can be altered. Extrinsic cognitive load relates to instructional features and assessments that are not beneficial for learning. This form of cognitive load is generated by the manner that information is physically presented to learners (i.e., the design, visuals, sounds, make a video, transcripts). Several authors studied how clarity of faculty instructions affect students' cognitive load (e.g., worked example effect) (Chen et al. 2014). Thus, when students experienced excessive cognitive load, they did not perform well. Finally, Germane cognitive load refers to the cognitive load that the instructor needs to promote; for example, variability effect or comparison and key principles (Atkinson, Renkl & Merrill, 2003). While Extrinsic cognitive load interferes with learning by unproductively overtaxing working memory, Germane cognitive load promotes acquisition into long-term memory (Debie, & Van de Leemput, 2014).

Perhaps the next step is to explore students' perspectives on how these four assignments (1) Create a video, (2) Post and reply; (3) Join a synchronized discussion; and (4) Participate in a non-synchronized discussion engage them in learning or overloading them with information.

Using various teaching and learning strategies to support students' accessibility and engagement, including the diverse learner, has been our goal in this online family health course. We acknowledge that this paper is anecdotal in nature, however online accessibility pedagogy approaches rigor commences with transparency through ongoing faculty sharing and critical reflection (Delgaty, Fisher & Thomson, 2017). We shared the four diverse approaches that we use in our online course. We also reflected on the extent of faculty feedback on students' posting and the thin line between engaging students and increasing workload.

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Peer-Mentoring Processes: Commentary on the Stop the Violence Train the Trainers Program

Kwadwo Adusei

ABSTRACT

Recent episodes of violence among African youth in Australia have been a concern for the Police and the African communities in the country. In Western Australia, the Police and the African communities in Perth have been searching for ways to reduce and prevent recent spates of violence among African youth in Perth. This paper presents preliminary findings of the impact of a pilot a youth mentoring program to create awareness among African youth in Western Australia about crime prevention. Dubbed “Stop the Violence Program”, the initiative advocated the use of trained and resourced local champions to mentor their peers on preventing anti-social behaviours. The program was collaboration between the Edith Cowan University, the Western Australia’s Organisation of African Communities and the Office of Multicultural Interests.

INTRODUCTION

The World report on violence and health defines youth violence as “violence that occurs among individuals aged 10–29 years who are unrelated and who may or may not know each other, and generally takes place outside of the home...[including] bullying, physical assault with or without a weapon, and gang violence” (Krug et al., 2010, p.5). According to the Australian Bureau of Statistics, young people aged 20-24 years were the highest offenders in Western Australia (3,345 offenders per 100,000 persons aged 20-24 years). While data that precisely measures the extent of violent behaviour among various ethnic groups in Perth is limited, recent occurrences, such as the battering of an African young man in Girrawheen, and publication in the media of violence among African youth in Perth and Melbourne have raised concerns about safety and security in African-populated suburbs in Australia (see Adhead, Clarke & Walsh, R., 2017; McNeill, 2016; see Oakes, 2012; Neill, 2016; Twentyman, 2016). In this regard, the WA Police have been engaging with African communities and undertaken several initiatives (including sports and community fora) aimed at preventing crime among African migrants in Australia. While these are ongoing, Perth African community leaders are seeking further insights on crime prevention models and have recently received funding from the Office of Multicultural Interests (WA government) to pilot a peer mentoring violence prevention program.

Peer mentoring is an agented approach for preventing violence through strengthening protective factors and reducing risk factors aimed at facilitating the overall healthy youth development (WHO, 2015; Hemphill & Smith, 2010). The idea of mentoring refers to a ‘partnership through which a more experienced person shares knowledge, skills, information and perspective to help a young person’s positive development’ (Adusei-Asante & Doh, 2017; Tolan, Schoeny, Bass, 2006, p.16). Mentoring programmes target youth engaged in, or believed to be at risk of, delinquent behaviour. Proponents of the mentoring approach to violence prevention assume that social learning processes will occur in the relationship between a mentor and mentee, and that the mentor can provide support in handling day-to-day problems, and guidance on alternative ways of dealing with situations that are likely to lead to violence (Adusei-Asante, 2018; WHO, 2015, p.42; Hemphill & Smith, 2010; Krug et al., 2010).

Effects of peer mentoring programs in preventing aggressive behaviour, delinquency and drug and alcohol use have been documented, but not without methodological flaws. For example, an evaluation of the Big Brothers, Big Sisters mentoring program in the United States found that it reduced illicit drug initiation by 46% and alcohol initiation by 27%, and increased protective factors such as school attendance, improved relationships with parents, and commitment to engage in school tasks (WHO 2015). This notwithstanding, internationally, the effectiveness of peer mentoring has been found to be indeterminate as multiple systematic reviews have provided conflicting conclusions (WHO, 2015). Furthermore, aside from the fact that most of the evidence is from very few western countries only, the research design of most previous studies has been described as lacking rigour, (Tolan, Schoeny, Bass, 2016; Hemphill & Smith, 2010; WHO 2015). This proposed study sought to fill this gap using a correlational methodology to: 1) establish the nature of the violence among the African youth 2) investigate the efficacy of peer mentoring as a violence prevention technique; and 3) explore the processes and identify relevant operational strengths and weaknesses pertaining to peer mentoring violence prevention approaches within the Australian African migrants' context using the "Stop The Violence Program" as a case study.

STOP THE VIOLENCE PROGRAM

"Stop the Violence Program" (STVP) was an initiative of the Organisation of African Community of WA Inc. (OAC-WA). As a concept the STVP was the brain child of Ibrahim Kerbe, a Sierra-Leone-Australian who was a victim of youth violence in Perth. He relived the experience as follows:

The issue of violence has gone on among our African youth for a long time. I was in club one night when a fight broke out with a few people. Some of my friends were injured and I was injured as well. I came home and decided we need to create platform on how we can reduce violence within our community. I made a page of Facebook and called it "Stop the Violence."

African opinion leaders in Perth bought into Ibrahim's idea, which coincided with the formation the OAC-WA, who now own and promote the program. The OAC-WA is a not-for-profit community-based organisation, which provides representation for all Africans in WA at the State and national levels. The STVP was launched in 2016 under the auspices of the City of Stirling. The OAC-WA designed the STVP further as an intervention to create awareness and address rising incidence of violence among African youth in Perth. Following the launch, the leadership of OAC-WA approached various organizations to develop learning modules to train selected African young people who would go out into the African communities in Perth to champion among their peers on peace and non-violent ways of resolving conflicts. Edith Cowan University, Western Australia, partnered with the OAC-WA and facilitated the development of the training modules in 2017, while studying it as a research program.

The program was implemented in two phases. Phase I was the "train the trainers" component and involved the selection of eighteen mentors, who were trained to champion crime prevention among their peers in Perth. The OAC-WA received expressions of interest from twenty potential mentors after which a rigorous procedure was applied to select the eighteen participants. The eighteen mentors took part in a structured training session on leadership and other relevant topics over a six-month period. The training focused on developing interpersonal, communication and facilitation skills of the mentors, as these were deemed necessary for delivering anti-violence messages to their peers. The most effective approaches for reducing youth violence and antisocial behaviour tend to be multi-faceted targeting multiple risk factors (Hemphill & Smith, 2010, p.v.; Toumbourou et al., 2007). As a result, topics covered in the sessions were broadened to include working with groups; basics in

criminal law; alcohol and violence; roots of violence; violence prevention techniques; conflict resolution; financial planning; migration and integration; working with media and internet publishing; cultural diversity; and event organisation. Experts working with the program's steering committee developed the modules in collaboration with Edith Cowan University. The sessions were delivered by professional facilitators from the Western Australian College of Teachers. The program had a steering Committee which consisted of the WA African community groups, Edmund Rice Centre Mirrabooka, Northern Suburbs Community Legal Centre, Scouts WA, Football West, White Ribbon WA, Curtin African Students Associations, City of Stirling, Cr. Lily Chen, WA Police, WA multicultural Association, Department of Child Protection and Family Studies Mirrabooka, Redeemed Care, and the University of Western Australia.

Phase Two involved commissioning of the eighteen mentors that successfully completed their training to implement peer mentoring programs in African communities Perth. The mentors were commissioned at a graduation ceremony at the Edith Cowan University in October 2017 by the WA State's Minister for Multi-Cultural Interests. The mentors were encouraged to lead by examples and implement programs that addressed club violence, family and domestic violence, alcohol and other drugs, anti-social behaviour and violence against women. The eighteen mentors were divided into three groups of six members each and were allocated funds to organise their own programs supported by a program coordinator, although they worked as a group in most of their post training events.

METHODOLOGY

This study was designed as a correlational longitudinal case study. Correlational studies establish whether or not two variables are correlated; in terms of how an introduction of a variable (peer mentoring program) corresponds to a change in the other variable (acquisition of knowledge or decrease or increase in violence) (Patton 2002; Natallier, 2013). Correlational research is believed to be robust when designed as a longitudinal study (Patton 2002; Liamputtong 2009). Correlational longitudinal studies allow the researcher to follow subjects over time with repeated monitoring of the manner in which training and peer mentoring will bring about change in the subjects' (mentors) attitudes to violence and its onward effect on their peers. A correlational longitudinal study is also compatible with case study approaches and qualitative research tools, and so offers opportunities to interview each of the mentors to assess the impact of the training on each of the mentors as a case (Patton 2002; Liamputtong 2009).

Data collection occurred before and after the training of the eighteen mentors. Participants in the study signed informed consent forms, per the requirements of the ethics clearance obtained from Edith Cowan University's ethics committee. Focus group discussions were conducted with the project's team, the trainers and the mentors before and at the end of the training. The discussion related to the difference the project had made in the lives of the mentors and their readiness to engage their peers. The data were first organised and then coded, following several rounds of manually reading them for immersion. Patterns identified were developed as key themes, some of which are discussed in this paper. Experts on violence prevention concur that it takes time for the impact of programs to be felt (Tolan et al., 2006, Krug et al., 2010; Hemphill & Smith, 2010). Thus, the paper acknowledges the program as ongoing and the fact that its impact may not have been realised fully within the last twelve months of implementation. The preliminary data collocated and analysed have provided insights on the nature of violence among African youth, the knowledge of the participants on violence and activities they are using to address violence among their peers in Perth.

Preliminary Findings

Nature of violence

Data obtained to date has revealed three main forms of violence that occurs among African youth in Western Australia. These include 1) Inter-African-country violence; 2) Same-nationality ethnic violence; and 3) "Leave my territory fights". The Inter-African-country violence happens where people from different countries living in Perth engage in brawls. These are usually isolated incidence and tend to transpire at sporting events. An example was the 2016 brawl between the sporting teams of Ghanaians and Sierra Leones during the local version of the African Cup of Nations' soccer competition in Perth. Same-nationality ethnic conflicts occur among people from the same African country. Insights obtained revealed that same-nationality tribal and were sometimes extension of conflicts happening between tribes in African. Informants who took part in this study mentioned. The data showed that these conflicts were incessant among the South Sudanese-Australians, in particular.

Territorial fights took place when a group felt that "strangers" had threatened or entered into their "spaces". Informants explained "spaces" as night clubs, symbols and females. Two forms of "leave my territory fights" were identified in the data. Conflicts between Australian urban aboriginal youth and African youth constitute the first type. The most classic was the brawl that took place in Girrawheen in 2015 which led to the tragic death of an African male teenager. Colic-Peisker & Tilbury (2008, p.1) argued that the phenomenon is deeply embedded in class and race issues, rather than simply in youth violence and that the relationship between the two groups reflects the history of strained race relations in modern Australia and a growing antipathy to multiculturalism. Colic-Peisker & Tilbury argued further that the reasons for the tensions between urban Aborigines and African young people related to perceptions of competition for material (housing, welfare, education) and symbolic (position in a racial hierarchy) resources, although the grounds for such a claim was not convincing. The second form of territorial fights African youth engage in happens with non-Australians (visitors). Informants cited examples from 2007 and 2008 when some African youth locked horns with African-American sailors that visited Perth during the period. Sources had it that the African young men felt that the African-American sailors were occupying their night clubs (in Northbridge) and interacting with local African girls any time they made stopovers in Perth.

Knowledge of violence

Data obtained from the mentors before the six-months course showed that, in general terms, their knowledge on key thematic areas of the course was limited. For example, before experiencing the training majority, of them thought of assault only in terms of physical contact. However, focus group discussion with the participants after the training showed that most of them had verifiable knowledge of physical contact and noncontact assaults. During the discussion most of the participants cited examples of non-contact scenarios that could pass for an assault under the Western Australia's criminal code. Several participants who took part in the focus group discussion were able to cite aspects of the WA criminal code on assaults and associated violent crimes. One of the modules focused on the relationship between alcohol violence and the cost to the Western Australia's economy. Before the training, while most of the participants were able to explain the effects of alcohol on violence, their knowledge on how violence impacts the economy was little. After experiencing the course, the STVP participants were able to demonstrate and discuss the effects of violence on the economy and the collateral negative impact on the image of African migrants in Australia.

Putting the knowledge in practice

The participants of the STVP have launched two concurrent peer mentoring programs in Perth. There is the schools-based mentoring programs where the participants engage African primary

and high school students and mentor them. Currently there are three schools involved in the schools-based program, namely the Balga Senior High School, Girrawheen Senior High School and the Dianella College. The other program is community-based work with in conjunction with local police (Microbiota Police) and the Department of Child Protection. The participants of the STVP identify at risk young Africans who are likely to commit violent crimes. They support the at risk young people and or link them to appropriate local social support services. As these programs are currently in their infancy, they will be monitored for their impacts during the year.

Event management

The six months training of the STVP participants introduced them to topics on event management, project management, financial management and people skills. These were necessary to prepare the participants as ambassadors who will go into the community to educate their peers on nonviolence. As a proof of their knowledge acquisition and readiness to implement their community projects, the participants were given tasks of organizing events. The participants, who until the advent of the STVP new little about event management, have successfully planned and implemented two important events, namely the 2017 African Youth Summit and the 2018 Jambo Africa. The 2017 African youth summit focused on creating more understanding on issues affecting African Australian youth. Jambo Africa is the largest annual African festival in Western Australia, and showcases African music, dancing, diverse arts, cultural performances and authentic African food that transports visitors to Africa. The mentors are also preparing to organize the 2018 Africa Day in Perth, while working on an online television station to discuss nonviolent ways to resolving conflicts.

CONCLUSION

This paper presented preliminary findings of the impact of the Stop the Violence Program launched in Western Australia to address recent episodes of violence among African youth in Australia. The program was collaboration between the Edith Cowan University, the Western Australia's Organisation of African Communities and the Office of Multicultural Interests. It trained eighteen young Africans who were supported to champion nonviolence in the African communities in Perth through various peer mentoring programs and events. The initial data collected and analysed have provided insights on the complex nature of violence among African youth, consisting of three main domains. The paper has also shed light on the demonstrable knowledge on violence acquired by the mentors and how they put it into practice through their organisation of various events and school and community-based peer mentoring program aimed at addressing anti-social behaviours in African communities in Perth. While it is early to make any big claims, the findings have shown that agented intervention programs such as the Stop Violence Program are able to achieve positive outcomes in milieus where youth violence thrives, if they are community-supported, resourced and sustained.

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Where Fisher, Neyman and Pearson went astray: On the logic (plus some history and philosophy) of Statistical Tests

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ABSTRACT

Statistical tests, nowadays used throughout the sciences, have had considerable impact and a colourful history. This article studies the underlying logic(s) and associated philosophies, in particular Neyman's and Pearson's point of view.

Keywords: Statistical testing; tests of hypotheses; scientific thinking; modes of inference; history of statistics; foundational issues

INTRODUCTION

Every scientific endeavour consists of (at least) two components: A hypothesis on the one hand and data on the other. There is always a more or less abstract level - some theory, a set of concepts, certain relations of ideas - and a concrete level, i.e., empirical evidence, experiments or some observations which constitute matters of fact.

The focus of this contribution is on elementary models connecting both levels that have been very popular in the social sciences - statistical tests. Going from simple to complex we will examine four paradigms of statistical testing (Fisher, Likelihood, Bayes, Neyman & Pearson) and an elegant contemporary treatment.

In a nutshell, testing is an easy problem that has a straightforward mathematical solution. However, it is rather surprising that the statistical mainstream has pursued a different line of argument. The application of the latter theory in psychology and other fields has brought some progress but has also impaired scientific thinking.

FISHER: ONE HYPOTHESIS

Every experiment may be said to exist only to give the facts a chance of disproving the null hypothesis. (Fisher (1935), p. 16)

The simplest and oldest formal model is Fisher's test of significance. There is just one distribution, called the "hypothesis" H (or P_H), and a sample from this population. Formally, the random variables X, X_1, \dots, X_n are iid, $X \sim P_H$, and $X_i = x_i$ are the observations subsequently encountered ($i = 1, \dots, n$). Thus $\mathbf{x} = (x_1, \dots, x_n)$ is the vector of data at hand.

In the continuous case, X has a density $f(x)$, whereas in the discrete case, X assumes values x_1, x_2, \dots with corresponding probabilities p_1, p_2, \dots . Information theory often restricts attention to random variables assuming values in a finite alphabet $\mathcal{X} = \{x_1, \dots, x_k\}$. In the following, in order to keep technical issues to a minimum, a random variable will be discrete if not otherwise stated.

Given this setting, suppose one observes a single x for which $p = P_H(X = x) = 0$. That is, this observation should not have occurred since the hypothesis does not account for it. It is simply impossible to see x if P_H is the case. In other words, this concrete observation x falsifies the hypothesis P_H , it is a counterexample to the law P_H . In philosophical jargon, this is a strict, logical conclusion (the modus tollens). One concludes without any doubt, although formalized by the probability statement ($p = 0$), that the hypothesis in question is not the case.

Now, what if p is “small”? Obviously, no matter how small the probability, as long as $p > 0$, the observation x is possible and we cannot infer with rigour that $X \sim P_H$ did not produce it. All one may say is that

Either an exceptionally rare chance has occurred, *or* the theory [hypothesis] of random distribution is not true. (Fisher (1956/73), p. 42, emphasis in the original)

Of course, such an “inductive statistic” (IS) argument is much weaker than “deductive nomological” (DN) conclusions, like the one considered before, and consequently a lot of discussion has been spawned by Fisher’s dichotomy (see, e.g., Salmon (1989), Fetzer (2001)). More important to our reasoning is the observation that no general statistical theory evolved from Fisher’s dichotomy. Here are two reasons why: First, if X assumes k distinct values x_1, \dots, x_k with probabilities p_1, \dots, p_k , “small” crucially depends on the number of possible observations k . (A probability of $p = 1/100$ is small if $k = 10$, however the same probability is rather large if $k = 10^6$ or $k = 10^{20}$, say.) Second, if P_H is the uniform distribution, we have no reason whatsoever to discard the hypothesis no matter which value occurs. Each and every x_j is equally (un)likely, but possible nonetheless. If P_H has a geometric distribution, i.e., if X assumes the natural number j ($j \geq 1$) with probability 2^{-j} it would be very difficult to tell beyond which number j_0 the probability p_{j_0} could be said to be “small”. Finally, for any continuous distribution, in particular the standard normal, we have $P(X = x) = 0$ for every x . However, since some realization must show up, some x will occur nevertheless.

Perhaps for reasons such as these, Fisher came up with a more sophisticated idea. Typically, most values observed are rather “moderate”, and only a few are “extreme” outliers (very large or very small). Suppose large values of X are suspicious. Then, having encountered x , it is straightforward to calculate $p = P_H(X \geq x)$, the probability of observing a value at least as large as x . If this so-called p -value is small, we have reason to reject the hypothesis. Of course, if small values of X are suspicious, it is $P_H(X \leq x)$ that should be considered, and in the case of outliers to the left and to the right of the origin, $P(X \geq |x|)$ is of interest. Thus we have a general rule: Calculate the probability of the value observed and of all “more extreme” events. This kind of evaluation may be crude, but it is also a straightforward way to quantify the evidence in the data x about the hypothesis P_H .

In the earliest test of this kind recorded, Arbuthnot (1710) looked at London births. His hypothesis was that it is equally likely to have a boy or a girl. (Why should one of the sexes be preferred?) Considering a moderate number n of years altogether, it would not be astonishing if the boys outnumbered the girls in about $n/2$ years, but by the laws of probability it would also not be surprising if there were more girls in perhaps 20 out of 30 years. However, it would be very surprising if, over a longer period of time, one sex outnumbered the other permanently. As a matter of fact, Arbuthnot checked $n = 82$ successive years and learned that in each and every year more boys than girls were born. If $P_H(\text{boy}) = P_H(\text{girl}) = 1/2$, the probability of the event “boys always outnumbering girls” happening by chance is 2^{-82} . Thus he concluded that some force “made” more boys than girls.

Suppose Arbuthnot had found eighty years with more boys than girls. Then Fisher's advice is to calculate

$$\begin{aligned} p &= P_H(X \geq 80) = P_H(X = 82) + P_H(X = 81) + P_H(X = 80) \\ &= \binom{82}{82} 2^{-82} + \binom{82}{81} 2^{-82} + \binom{82}{80} 2^{-82} = \frac{1 + 82 + 3321}{2^{82}} = \frac{3404}{2^{82}} \approx 7 \cdot 10^{-22}. \end{aligned} \quad (1)$$

Since all probabilities sum up to one, this seems to be a small "probability value", and thus a remarkable result. Fisher (1929), p. 191, writes:

It is a common practice to judge a result significant, if it is of such a magnitude that it would have been produced by chance not more frequently than once in twenty trials. This is an arbitrary, but convenient, level of significance for the practical investigator [...]

Today, the standard levels of significance are 5%, 1%, and 0.1%. Although, "surely God loves the 0.06 nearly as much as the 0.05?" (Rosnow und Rosenthal 1989)

Objections

Despite the above rather natural derivation, problems with p -values and their proper interpretation turned out to be almost endless:

The smaller the p -value, the larger the evidence against some hypothesis H , an idea already stated explicitly in Berkson (1942). Thus one should be able to compare p -values or combine p -values of different studies. Unfortunately, if two experiments produce the same p -value, they do not provide the same amount of evidence, since other factors, in particular the total number of observations n , also play a considerable role (Cornfield 1966: 19).

Johnstone (1986), p. 496, elaborates: "Thus, as Jeffreys explained in 1939, if the sample is very large, the level of significance P tends to exaggerate the evidence against the null hypothesis, i.e. P tends to be smaller than it ought to be. But in practice, if the sample is very large, a good orthodox statistician will 'deflate' intuitively the level of significance P accordingly." McPherson (1989) comments on this: "This is very likely true, but it is an inadequate base for presenting the p value approach to scientists."

The best one can do seems to be rules of thumb. For example, Efron und Gous (2001), p. 212, consider the normal distribution and sample size n in order to translate p -values into evidence. However, Royall (1986) demonstrates that contradictory statements are possible: "A given P -value in a large trial is usually stronger evidence that the treatments really differ than the same P -value in a small trial of the same treatments would be" (Peto et al. (1976), p. 593). But also "The rejection of the null hypothesis when the number of cases is small speaks for a more dramatic effect [...] if the p -value is the same, the probability of committing a Type I error remains the same. Thus one can be more confident with a small N than a large N " (Bakan (1970), p. 241) is a reasonable line of argument.

In a nutshell, it is very difficult to interpret and combine p -values in a logically satisfactory way (see Greenland et al. (2016), Hubbard and Lindsay (2008) for recent overviews). Schmidt (1996), p. 126, also collects common ideas, in particular,

If my findings are not significant, then I know that they probably just occurred by chance and that the true difference is probably zero. If the result is significant, then I

know I have a reliable finding. The p values from the significance test tell me whether the relationship in my data are large enough to be important or not. I can also determine from the p value what the chances are that these findings would replicate if I conducted a new study

and then concludes that “every one of these thoughts about the benefits of significance testing is false.” The most devastating point, however, seems to be the following consideration.

The Observed and the Unobserved

The distinction between the observed and the unobserved is fundamental to science. Science is built on facts, not speculation. Why have eminent statisticians confounded these two areas?

It is not difficult to see how ‘Student’ and Fisher found themselves defending the use of the P integral. For if one accepts that it is possible to test a null hypothesis without specifying an alternative, and that the test must be based on the value of a test statistic in conjunction with its known sampling distribution on the null hypothesis, then the integral of the distribution between specified limits is the only measure which is invariant to transformation of the statistic. It follows that one is virtually forced to consider the area between the realized value of the statistic and a boundary as the rejection area - the P integral, in fact. (Edwards (1992), p. 178)

In other words, although the last paragraph can be interpreted as an invariance argument in favour of p -values (even if the measuring process is rather arbitrary, and only the ordering of the values recorded corresponds to something real, the p -value makes sense, since $P(X \geq x) = P(f(X) \geq f(x))$ for any monotone transformation f); Fisher, considering a single hypothesis, simply had no other choice but to calculate P integrals such as (1). He knew that this way to proceed was not really sound:

Objection has sometimes been made that the method of calculating confidence limits by setting an assigned value such as 1% on the frequency of observing 3 or less [...] is unrealistic treating values less than 3, which have not been observed, in exactly the same manner as 3, which is the one that has been observed. This feature is indeed not very defensible save as an approximation. (Fisher (1956/73), p. 71)

However, a rather straightforward example illustrates that even the roundabout idea of “approximation” is difficult to defend. Suppose $P_H(X < x) = 0.01$ and $P_H(X = x) = 0.02$, small values of X being suspicious. If x is observed, the one-sided test may reject P_H since $P_H(X \leq x) = 0.03$. Now look at the (modified) hypothesis K where $P_K(X = x) = 0.02$, but $P_K(X < x) = 0.4$. In this case $P_K(X \leq x) = 0.42$ and no test would reject K . Yet the probability of the observed value x is the same for both hypotheses! The conclusion differs tremendously just because of values that were *not* observed:

An hypothesis that may be true is rejected because it has failed to predict observable results that have not occurred. This seems a remarkable procedure. On the face of it, the evidence might more reasonably be taken as evidence for the hypothesis, not against it. (Jeffreys (1939), p. 316)

Altogether, Fisher's paradigm seems to be too coarse. What is needed are more elaborated models, able to distinguish between observed and merely possible values, and explicitly formalizing other relevant aspects, such as the probability of committing an error or the strength of some effect.

TWO HYPOTHESES

In order to keep things as simple as possible, E. S. Pearson (1938), p. 242, proposed the following move:

[...] the only valid reason for rejecting a statistical hypothesis is that some alternative hypothesis explains the observed events with a greater degree of probability.¹

Given (at least) two hypotheses H and K , it is of fundamental importance to understand that there are *two completely different ways to generalize* Fisher's approach. Either one sticks with integrals, which is the main feature of the Neyman-Pearson theory, or one directly compares $P_H(x)$ with $P_K(x)$. We will start with the latter idea:

Likelihood Ratio Tests

Given two hypotheses, it is perhaps most obvious to study the ratio $P_K(x)/P_H(x)$. In particular, since "... a proper measure of strength of evidence should not depend on probabilities of unobserved values" (Royall (1997), p. 69). Obviously, a ratio larger than one is evidence in favour of K , and a ratio that is smaller than one provides evidence in favour of H .

With successive observations x_1, x_2, \dots evidence for (and against) some hypothesis should build up. Mathematically, it is straightforward to consider the likelihood ratio, i.e., the product

$$r_n = r_n(x_1, \dots, x_n) = \prod_{i=1}^n \frac{P_K(x_i)}{P_H(x_i)}. \quad (2)$$

With every observation, the odds change in favour of one of the hypotheses (and thus, simultaneously, against the other). Let P_{X^n} be the empirical distribution of a sample of size n . Due to the law of large numbers, $P_{X^n}(x) \rightarrow P_H(x)$ for every $x \in \mathcal{X}$ almost surely, if P_H is the true distribution. This basic result almost immediately implies the likelihood convergence theorem: That is, (2) converges almost surely to zero if H is true, and to $+\infty$ if K is true. (See Royall (1997), p. 32, for discrete probability distributions and Chow and Teicher (1997), p. 257, for densities.)

It thus seems to be justified to decide in favour of K if the likelihood ratio exceeds some pre-assigned threshold s ($s > 1$). As Robbins (1970) showed, if H is correct, the probability that the ratio at one point of time exceeds s is just $1/s$. Formally:

$$P \left(\prod_{i=1}^n \frac{P_K(X_i)}{P_H(X_i)} \geq s \text{ for some } n = 1, 2, \dots \right) \leq \frac{1}{s}$$

Notice that even "if an unscrupulous researcher sets out deliberately to find evidence supporting his favourite hypothesis [K] over his rival's [H], which happens to be correct, by a factor of at least [s], then the chances are good that he will be eternally frustrated" (Royall (1997), p. 7).

¹As early as 1926, Gosset wrote to E.S. Pearson: "[...] if there is any alternative hypothesis [...] you will be much more inclined to consider that the original hypothesis is not true [...]" (See Royall (1997), p. 68, and the discussion in Hodges (1990), pp. 76.) It may be mentioned that Laplace had improved upon Arbuthnot in the 1770s, i.e., he had compared sex ratios at birth of several cities (cf. Stigler (1986), pp. 134).

Since the normal distribution is particularly important, Royall (1997), p. 52, considers it in much detail and finds that $s = 8$ and $s = 16$, or $s = 1/8 = 0.125$ and $s = 1/16 = 0.0625$, respectively, are reasonable choices. For more details see Royall (2000), Goodman und Royall (1988), and Bookstein (2014), p. 194, who reproduces Jeffreys’ rule of thumb: $r_n > 1$ supports K , $1 > r_n > 0.3$ supports H , “but not worth more than a bare comment.” However, the evidence in favour of H (and thus, equivalently, against K) is

substantial	if	$0.3 > r_n > 0.1$	very strong	if	$0.03 > r_n > 0.01$
strong	if	$0.1 > r_n > 0.03$	decisive	if	$0.01 > r_n$

Bayesian Tests

The likelihood ratio may serve as the core piece of a Bayesian analysis. To this end let π_H be the prior probability of the first hypothesis, and $\pi_K = 1 - \pi_H$ the prior probability of the second. Having observed $\mathbf{x} = (x_1, \dots, x_n)$, Bayes’ theorem states that the odds ratio of the posterior probabilities of the hypotheses is

$$\frac{\pi(K|x_1, \dots, x_n)}{\pi(H|x_1, \dots, x_n)} = r_n(x_1, \dots, x_n) \cdot \frac{\pi_K}{\pi_H} = \prod_{i=1}^n \frac{P_K(x_i)}{P_H(x_i)} \cdot \frac{\pi_K}{\pi_H} \tag{3}$$

If $0 < \pi_H < 1$, i.e., if both hypotheses are considered possible at the beginning, there are convergence results of a very general nature that guarantee that the true hypothesis will be found almost surely (e.g., Walker (2003, 2004)).

Moreover, it is possible to emulate Fisher’s idea of a *single* explicit hypothesis. (For an example, see Bookstein (2014), pp. 197.)

Neyman and Pearson

Mathematicians J. Neyman and E.S. Pearson also improved upon Fisher’s initial idea. In theory as well as in applications, their line of reasoning has become standard. Like Fisher, they used integrals, i.e., probabilities like $P(X \geq x)$. However, in order to avoid confounding the observed with the unobserved, they insisted that such probabilities be computed in advance, i.e., *before* recording empirical data.

Their paradigm situation is as follows: Denote by $N(\mu, \sigma)$ the normal distribution with expected value μ and standard deviation σ . Let $P_H \sim N(\mu_H, \sigma)$, $P_K \sim N(\mu_K, \sigma)$, and suppose without loss of generality that the absolute effect size $\eta = \mu_K - \mu_H$ is non-negative. Since for both hypothesis and each x the densities $\varphi_H(x)$ and $\varphi_K(x)$ are positive, we can never be sure which hypothesis is the case. All we can do is try to minimize the error of the first kind (a decision in favour of K , although H is true) and the error of the second kind (a decision in favour of H , although K is true).

Given population H or K , the mean $\bar{X}_n = \sum X_j/n$ of the observations is also normally distributed with parameters μ' , the correct hypothesis’ expected value, and standard deviation σ/\sqrt{n} . (Thus, the larger the sample, the smaller the mean’s standard deviation.) A rather straightforward treatment of this situation would look for the point m where $\varphi_H(x) = \varphi_K(x)$ which, due to symmetry, is just $m = (\mu_H + \mu_K)/2$, and decide in favour of H if $x < m$, and in favour of K if $x \geq m$. This leads to the total probability of error

$$P_e(n) = \alpha_n + \beta_n = P(\bar{X}_n \geq m|H) + P(\bar{X}_n < m|K) \tag{4}$$

which can be made arbitrarily small with growing n , for any fixed $\eta = \mu_K - \mu_H > 0$.

However, perhaps since the errors of the first and of the second kind have different consequences, Neyman and Pearson decided to treat the null hypothesis H (typically representing arbitrary fluctuations, i.e., “no effect”) and the alternative K (representing a substantial effect) *asymmetrically*. With n and the effect size η thus given, Neyman und Pearson (1933), pp. 79, advised as follows:

From the point of view of mathematical theory all that we can do is to show how the risk of the errors $[\alpha, \beta]$ may be controlled and minimized. The use of these statistical tools in any given case, in determining just how the balance [between the two kinds of errors] should be struck, must be left to the investigator.

They also fixed α (i.e, the level of error of the first kind, meaning that an effect is detected although there is none). Now they could look for the optimum decision procedure, minimizing β , which they determined in Neyman und Pearson (1933).

Knowing the best test, one can also control for the errors (e.g., by fixing α to 0.01, and assuming $\beta = 0.3$, say), and set out to detect an effect of a certain size η with the minimum number of observations n necessary. E. S. Pearson (1955), p. 207, explains:

The appropriate test is one which, while involving (through the choice of its significance level $[\alpha]$) only a very small risk of discarding my working hypothesis $[H]$ prematurely will enable me to demonstrate with assurance $[1 - \beta]$ (but without any unnecessary amount of experimentation) the reality of the influences which I suspect may be present $[K]$.

In this view, every observation comes with a cost and a major goal of the statistical design of experiments is to make just enough observations in order to convincingly demonstrate a certain effect - n is just as large as necessary, not as large as possible.

SOME CONSEQUENCES

The standard style of inference

Suppose there is an effect η of a certain size, and the sample size n is fixed. Then the investigation hinges strongly on the asymmetry between α and β , being treated differently. Cornfield (1966), p. 21, wasn't the only one to question this choice:

It is clear that the entire basis for sequential analysis [and much of received testing theory] depends upon nothing more profound than a preference for minimizing β for given α rather than minimizing their linear combination. Rarely has so mighty a structure and one so surprising to scientific common sense, rested on so frail a distinction and so delicate a preference.

In practice, researchers did not use the additional degree of freedom introduced by Neyman und Pearson (1933) either. Despite their and Fisher's advice, rather coarse standards such as $\alpha = 0.05$, or Cohen's (1988, 1992) classification of effects (small, medium, large) caught on, until testing became a “ritual” (Gigerenzer et al. 2004).

With all parameters set in advance, a test is indeed a strict decision procedure, and “the basic objection to this program is that it is too rigid. . .” (Lehmann (1993), p. 70). In fact, all one gets is an (asymmetric) dichotomous decision against or in favour of K , and the procedure is so tight that it cannot be extended at all. Cornfield (1966), p. 19, writes (see also Royall (1997), p. 111 on these matters):

An experimenter, having made n observations in the expectation that they would permit the rejection of a particular hypothesis, at some predesignated significance level, say .05, finds that he has not quite attained his critical level. He still believes that the hypothesis is false and asks how many more observations would be required to have reasonable certainty of rejecting the hypothesis [. . .]

Under these circumstances it is evident that there is no amount of additional information, no matter how large, which would permit rejection at the .05 level. If the hypothesis being tested is true, there is a .05 of its having been rejected after the first round of observations. To this chance must be added the probability of rejecting after the second round, given failure to reject after the first, and this increases the total chance of erroneous rejection to above .05 [. . .] Thus no amount of additional evidence can be collected which would provide evidence against the hypothesis equivalent to rejection at the $P = 0.05$ level [. . .]

In other words: In this perspective, α is a limited, non-renewable resource. “Once we have spent this error rate, it is gone” (Tukey (1991), pp. 104). Thus it has to be used with great care: “[. . .] a very few prespecified comparisons will be allowed to eat up the available error rate, and the remaining comparisons have the logical status of hints, no matter what statistical techniques may be used to study them.” (Tukey (1991), pp. 104)

In order to avoid an “inflation” of error, it seems wise to distribute the error rate of 5% say, among all tests planned. The standard technique is to adjust α , a priori, by some scheme taking the whole family of tests into account. Salsburg (1985), p. 221, reports the consequences of such a consistent attitude:

Finally, we should consider the subclass of practitioners who are ‘more holy than the Pope,’ so to speak. To these practitioners, the whole purpose of the religion of Statistics is to maintain the sanctity of the alpha level (which is another name for 0.05). No activity that appears to involve looking at data for sensible combinations of interesting effects is allowed. It is forbidden, in fact, to do anything more than to compute the p value using a method determined in advance of the experiment and fully documented at that time.

Note also that if only a small proportion of α is spent in every test, the overall procedure becomes very conservative: In the Neyman-Pearson framework, a very small α corresponds to an inflation of β and thus deteriorating power $1 - \beta$. Since research in the social sciences is generally plagued by low power, this attitude makes it even more difficult to detect effects. Ellis (2010), p. 79, concludes:

Instead of dealing with the very credible threat of Type II errors, researchers have been imposing increasingly stringent controls to deal with the relatively unlikely threat of

Type I errors (Schmidt 1992). In view of these trade-offs, adjusting alpha may be a bit like spending \$1,000 to buy insurance for a \$500 watch.

Royall (1991), p. 57, states another way to deal with the problem described by Tukey. Instead of lowering α for each test, one simply restricts the number of planned tests:

...do not allow those who are conducting the trial to look at the results as they accumulate. That is, [...] conceal the evidence from the physician until the trial is completed.

Altogether, the Neyman-Pearson framework gives some justification for minimizing the amount of information collected, and the number of looks at the data. This fits well with Popper's rationalistic view, who always emphasized the role of theory and deduction in the guise of falsification, downplaying the role of data, and rejecting induction firmly (Popper 1959, Popper and Miller 1983). However, scientific common sense and practice rather point in the opposite direction: If we are to learn from experience, an open-minded attitude and any reasonable analysis, be it hypothesis- or data-driven, should be encouraged. Keiding (1995), p. 242, admits that

[...] it is indeed unsatisfactory to have to defend, perhaps in the face of senior, highly qualified substantive scientists, our mainstream statistical thinking which assumes that you are not supposed to look at the data when searching for methods of optimal analysis with the purpose of gaining new knowledge.

Confusion

Since there are several theories (at least two), each of them accompanied by a certain "logic", data analysis is a tricky business, and there is also lot of confusion.

In particular, despite their mathematical similarity, data-dependent p -values and error levels set in advance are completely different. It is against the grain of the Neyman-Pearson theory to calculate α -levels a posteriori (for example, one, two or three stars indicating that some empirical result has been significant at the 0.05, 0.01 or the 0.001-level), to report p -values instead of zero-one decisions, or to restrict attention to one hypothesis (typically the null, although two hypotheses might be mentioned). Nevertheless, practice and textbooks use p -values and α -levels almost interchangeably, thus creating an "alphabet soup" (Hubbard 2004).

On a less formal level, there is also much conceptual confusion, (inductive) evidence in Fisher's sense and (deductive) decisions in Neyman's and Pearson's being conflated:

This hybrid is essentially Fisherian in its logic, but it plays lip service to the Neyman-Pearson theory of testing [...] Some researchers do use the Neyman-Pearson theory of testing in a pure form, but they constitute a small minority [...] Regardless of their terminology and verbal allegiance, most researchers in the fields mentioned above use and/or accept as valid a pattern of inductive reasoning that is characteristic for the Fisherian test of significance. (Spielman (1974), p. 211)

It is a crucial ingredient of the standard Neyman-Pearson theory to treat the hypotheses asymmetrically. Typically, the null hypothesis represents the idea that pure chance produced the data at hand, whereas its alternative claims that an interesting substantial effect has left its traces

in the data. Obviously, any “logic of empirical science” demands that the more data there is, the more difficult it should be for a substantial hypothesis to succeed: “. . . in physics and the related disciplines the parent theory is subjected to ever more critical examination as measurement techniques, in their broadest sense, improve. That is, as power increases the ‘observational hurdle’ that the theory must clear becomes greater.” (Oakes (1986), pp. 40)

In other words, as information accrues, it becomes easier to detect if the data deviate from a particular hypothesis. For example, suppose your hypothesis (derived from basic theory) claims that about $6.6 \cdot 10^{10}$ neutrinos should hit the surface of the earth per second and cm^2 . Then measurements should confirm this guess, i.e., the number of neutrinos actually counted should be close to $6.6 \cdot 10^{10}/s \cdot cm^2$. In the jargon of statistical tests this means that “[. . .] in the physical sciences the substantive theory is associated with the null hypothesis and to the extent that it defies rejection it commands respect” (cf. Oakes (1986), p. 41. For a contemporary example see van Dyk (2014).)

However (Oakes (1986), pp. 40), “the opposite is the case in the social and behavioural sciences [. . .] In psychology and the social sciences the substantive theory is associated with the alternative hypothesis and is corroborated as the null hypothesis is rejected. In this sense the observational hurdle which the theory must clear is lowered as power or experimental precision is increased. This is the great weakness of identifying a theory with the alternative hypothesis”:

Putting it crudely, if you have enough cases and your measures are not totally unreliable, the null hypothesis will always be falsified, *regardless of the truth of the substantive theory* (Meehl (1978), p. 822, emphasis in the original).

Perhaps it is quite telling that, although this phenomenon was described by an eminent psychophysicist 50 years ago (Meehl 1967), and has been decried many times ever since (e.g., Meehl (1990, 1997), Gelman et al. (2013), Bookstein (2014)), this kind of “mindless statistics” (Gigerenzer 2004) has thrived (Hubbard und Ryan 2000). Its “career” is quite similar and related to that of p -values which, despite their major shortcomings, have also become standard in many sciences.

The scientific style of inference

Apart from the consequences already described, the standard treatment, i.e.,

1. considering intervals like $P_H(X \leq x)$ instead of point probabilities,
2. dealing with the hypotheses (and thus, α, β) in an asymmetric manner, and
3. putting all parameters constituting a standard test on a par

has led to the following:

- (a) $1 - \beta$ is identified with the importance or even with the “scientific power” of a certain study.
- (b) Power analysis. For example, upon designing a clinical trial, it is now mandatory to calculate the number of patients n , given the level of significance α , power $1 - \beta$, and effect size η .
- (c) The attitude that observations are “expensive” - since, given α, β and η , the above line of thought supposes that a small sample is optimum.

Alas, “inventing virtuous-sounding terms” (cf. Jaynes (2003), p. 514) like *power* does not solve problems. Rather, emphasis on $1 - \beta$ obscures the fact that the “real” impact of a trial consists in its contribution to a series of experiments, all investigating the same phenomenon (Ottenbacher 1996). To this end, the effect size η is much more important:

...the emphasis on significance levels tends to obscure a fundamental distinction between the size of an effect and its statistical significance. Regardless of sample size, the size of an effect in one study is a reasonable estimate of the size of an effect in replication (Tversky and Kahneman (1971), p. 110).

Guttman (1985), pp. 3, adds: “The emphasis on statistical significance over scientific significance in education and research represents a corrupt form of the scientific method...”

A priori power analysis (Cohen 1988, Ellis 2010) hinges on the idea that α , $1 - \beta$, η and n “... are so related that any one of them is a function of the other three, which means that when any three of them are fixed, the fourth is completely determined” (Cohen (1988), p. 14). Although it surely is a good idea to think hard about one’s hypotheses before collecting data, formulae such as (4) indicate that α and β had better depend on n . In particular, $\alpha(n)$ should be a decreasing function in n (see, e.g., subsection “objections,” Lindley (1957), Hurlbert and Lombardi (2009), pp. 333, and Naaman (2016)).

Finally, and most importantly, since information accrues with data, the overall attitude toward n should be quite the opposite to that of Pearson:

There are no inferential grounds whatsoever for preferring a small sample [...] the larger the sample the better [...] The larger the sample size the more stable the estimate of effect size; the better the information, the sounder the basis from which to make a decision [...] (Oakes (1986), pp. 29, 32)

In everyday life, this often means collecting data until the evidence has accumulated sufficiently:

An experiment involving an image-producing apparatus often ends appropriately with a ‘golden event’, that is, a picture or image of something whose existence has been conjectured, but possibly questioned. An experiment involving a counting apparatus often ends appropriately when a decision based on some probability model suggests that enough counts have been taken for some purpose. (Ackermann (1989), p. 189)

If some insight thus occurs all of a sudden, the crucial last step, has, with a wink, been called the *interocular traumatic test*: “You know what the data mean when the conclusion hits you between the eyes” (Edwards et al. (1962), also see Bookstein (2014)).

Altogether, η and n seem to be much more important than α and β . It is also no coincidence that any philosophy based on a suboptimal formal treatment yields opinions that are at variance with common sense (Neyman 1977, Mayo 1996). For an important example see the next section.

A blurred view

Neyman und Pearson (1933), p. 74, state:

If x is a continuous variable ... then any value of x is a singularity of relative probability equal to zero. We are inclined to think that as far as a particular hypothesis is

concerned, no test based upon a theory of probability (Footnote: cases will of course, arise where the verdict of a test is based on certainty...) can by itself provide any valuable evidence of the truth or falsehood of that hypothesis.

In the light of the above discussion, this statement - still very popular today - permutes rule and exception. It is much too pessimistic, since, owing to the (very) general convergence results, no matter whether the variables are discrete or continuous, given enough observations, H and K can be distinguished with hardly any doubt. For example, just a few throws suffice to decide between a cube with the numbers $\{0, \dots, 5\}$, and a cube with the numbers $\{1, \dots, 6\}$. More generally speaking, if the support of H and K is not the same (i.e., if there exists some x such that $P_H(x) = 0$ and $P_K(x) > 0$, or vice versa), one is able to discriminate deterministically between the hypotheses after just a finite number of observations.

Of course, for any continuous random variable X , and any realization x , $P(X = x) = 0$. Therefore, given two hypotheses, one has to consider their densities, $f_H(x)$ and $f_K(x)$ say. In the case of the normal family (and many others), the support of any two densities coincides. Thus, rather trivially, no matter which x is observed, one cannot decide for sure if H or K is the case. However, the ratio $f_K(x)/f_H(x)$ gives valuable evidence and much more so will $r_n(x_1, \dots, x_n)$ if n is not too small. Asymptotically, any doubt vanishes completely. Thus in a nutshell, a statistical test is a powerful tool.

TESTING NEED NOT BE COMPLICATED

Statisticians, philosophers and scientists have written much about (styles of) inference and statistical philosophies (e.g., Neyman (1955, 1961, 1977), Jones (1986), Good (1988), Barnett (1999), Fisher (2003), Jaynes (2003), Dienes (2011), Cumming (2014), Spanos (2014), Haig (2016)). Instead of adding another opinion, it may be wiser to go back to the original issue:

First, since the basic problem is rather elementary, one expects an elegant, satisfactory answer. Second, since Fisher's treatment is too coarse and leads immediately to almost inextricable problems, there is a consensus that two hypotheses should be considered. Third, the last section shows that Neyman's and Pearson's treatment has led to disappointment. Why?

Looking at their model from a mathematical point of view, the P integral springs to mind. Introduced by Fisher - *faute de mieux* - it is given the leading part in Neyman's and Pearson's two-hypotheses setting, and is at the root of all subsequent trouble. More precisely: To keep up the basic distinction between the observed and the unobserved, one has to stick to a strict prior viewpoint. Since this is hardly possible and has curious consequences, it is no coincidence that Neyman's and Pearson's stance has merged with Fisher's position (and other ideas), almost inevitably creating confusion and endless discussion.

The good news is that a large part of the scientific and philosophical turmoil is due to a *particular mathematical treatment* - Neyman and Pearson have made testing more complicated than it needed to have been. Therefore a better, more elegant treatment should be able to rectify most of the defects since, due to the law of large numbers, testing is an easy problem:

If n is not too small, the empirical distribution of the data P_{X^n} is (in any reasonable sense) close to the true distribution P_H . The test of one hypothesis gives a formalized answer to the simple question: Is the data I have observed compatible with my hypothesis? If there are two or several hypotheses, the question becomes: Given my set of data, which hypothesis should I

choose? Qualitatively speaking, it is reasonable to choose the hypothesis which is closest to the data, and to reject a hypothesis if the data is “far away” from P_H .

A contemporary treatment, focussing on information and (generalized) distance of distributions, therefore starts with the likelihood ratio. Suppose there are two hypotheses H, K , represented by their distributions P_H, P_K . Define their KL-divergence (Kullback and Leibler 1951):

$$D(P_K||P_H) = \sum_{x \in \mathcal{X}} P_K(x) \log \frac{P_K(x)}{P_H(x)},$$

where $D(P_K||P_H) < \infty$, and, for the sake of mathematical simplicity, \mathcal{X} is a finite set. $D(P_K||P_H)$ may be interpreted as a “generalized distance” between distributions. Since its introduction, it has become a core concept of information theory and beyond (e.g., see Cover und Thomas (2006), pp. 377, and their pointers to the literature).

The key result, connecting the likelihood ratio and KL-divergence is

$$\log \frac{P_K(x_1, \dots, x_n)}{P_H(x_1, \dots, x_n)} = \sum_i \log \frac{P_K(x_i)}{P_H(x_i)} = n(D(P_{X^n}||P_H) - D(P_{X^n}||P_K)), \tag{5}$$

where P_{X^n} is the empirical distribution of the data.

In the most complete (i.e., Bayesian) setting, H and K are endowed with prior probabilities, π_H and π_K , respectively. Given an iid sample x_1, \dots, x_n from either P_H or P_K , let $A_n \subseteq \mathcal{X}_n$ be the acceptance region for H , depending on n . Thus one obtains the error probabilities $\alpha_n = P_H(\bar{A}_n)$ and $\beta_n = P_K(A_n)$, where \bar{A}_n denotes the complement of A_n , i.e., the acceptance region of K . Finally, it is straightforward to minimize the total probability of error $P_e(n) = \pi_H \alpha_n + \pi_K \beta_n$.

Given this symmetric treatment of the hypotheses, and error probabilities depending on n , it turns out (Cover und Thomas (2006), p. 388) that “the optimum decision rule is to choose the hypothesis with the maximum a posteriori probability,” which means to choose K if $\pi_K P_K(X_1, \dots, X_n) > \pi_H P_H(X_1, \dots, X_n)$, and H , if the inequality is in the other direction. Equivalently, the best strategy is a decision in favour of K if

$$\log \frac{\pi_K}{\pi_H} + \sum_i \log \frac{P_K(X_i)}{P_H(X_i)} > 0,$$

and in favour of H otherwise. Because of (5), the latter inequality is tantamount to a decision in favour of K if and only if

$$nD(P_{X^n}||P_H) - \log \pi_H > nD(P_{X^n}||P_K) - \log \pi_K.$$

Without prior probabilities, it is best to decide in favour of K if the empirical distribution is “closer” to P_K , i.e., if $D(P_{X^n}||P_H) > D(P_{X^n}||P_K)$. More generally speaking, because of (5), a decision in favour of K if $P_K(x_1, \dots, x_n)/P_H(x_1, \dots, x_n) \geq s$, i.e., if the likelihood ratio exceeds a certain threshold ($s \geq 1$), is equivalent to a decision in favour of K if $D(P_{X^n}||P_H) - \frac{1}{n} \log s \geq D(P_{X^n}||P_K)$. In other words, the likelihood ratio test advises choosing K if the divergence $D(P_{X^n}||P_K)$ is smaller than $D(P_{X^n}||P_H)$ minus the asymptotically vanishing “safety margin” $(\log s)/n \geq 0$. Moreover, if K is true,

$$\lim_{n \rightarrow \infty} \frac{1}{n} \log \frac{P_K(X_1, \dots, X_n)}{P_H(X_1, \dots, X_n)} \rightarrow D(P_K||P_H) \quad \text{in probability.}$$

The test closest to Fisher's original idea is Hoeffding's "universal test", which merely compares the data with a fixed hypothesis. It decides in favour of H if the empirical distribution is within a certain acceptance region A_n about P_H , i.e., if

$$D(P_{X^n}||P_H) \leq c_n.$$

Because of the law of large numbers, the sequence c_n decreases rapidly with increasing n . (For details see Hoeffding (1965), theorems 7.1 and 5.1.)

DISCUSSION AND CONCLUSIONS

At first glance, it seems to be a drawback that KL-divergence is not a proper metric. In particular, given two distributions P_H and P_K , in general, $D(P_H||P_K) \neq D(P_K||P_H)$. However, in the case of data and hypotheses this is an advantage, since there is a striking asymmetry between moving from specific observations to general laws (induction) and the opposite direction (deduction).

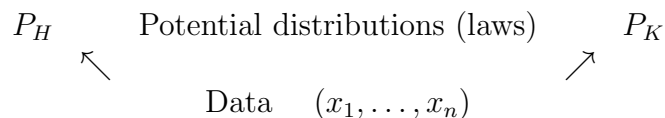
Hoeffding's test starts with a hypothesis H and asks if the data lies within a circle of radius c_n about P_H . An even more straightforward way to proceed would be to start with data $\mathbf{x}_n = (x_1, \dots, x_n)$ and ask if P_H lies within a circle of radius c'_n about the empirical distribution. There is a real difference: Hoeffding looks for data compatible with some conjectured hypothesis, whereas the second approach conditions on the data and looks for hypotheses that are compatible with the observations.

At least from a mathematical point of view, asymptotically, these preferences do not matter, since, if H is the true hypothesis, by the law of large numbers $P_{X^n}(a) \rightarrow P_H(a)$ for every $a \in \mathcal{X}$ in probability (and almost surely). Thus, for every a with $P_H(a) > 0$,

$$\lim_{n \rightarrow \infty} \frac{P_{X^n}(a)}{P_H(a)} = \lim_{n \rightarrow \infty} \frac{P_H(a)}{P_{X^n}(a)} = 1$$

which implies $\lim_{n \rightarrow \infty} D(P_{X^n}||P_H) = D(P_H||P_{X^n}) = 0$ with probability one.

In total generality, i.e., in philosophy, deduction is regarded as rather unproblematic. However, the problem of induction has haunted statistics, philosophy, and perhaps also the sciences at least since David Hume's time (Howson 2003). A standard statistical test is a particularly simple model to study these matters - a "test bed" if you allow the play on words. Any such test considers hypotheses (typically two), collects an iid sample x_1, \dots, x_n , and finally decides in favour of or against a hypothesis. Schematically,



Philosophers named this kind of reasoning "inference to the best explanation" (Lipton 2004), but also leading statisticians have always been well aware of the basic issue involved. While Fisher (1935, 1955) thought in terms of inductive inference, Neyman (1977) sided with the deductive line of argument. Considering a single experiment, Fisher thus calculates the p -value, expressing the *evidence* in the data against a hypothesis. Starting with hypotheses, instead, Neyman and Pearson focus on *probabilities of error* and how to control them. (Quite similarly, Bayesians focus on the data at hand, whereas orthodox theory is much more concerned with the process producing the data.)

In the end, the strong link between Neyman's Frequentist school and Popper's critical rationalism strengthened both points of view, with the consequence that their positions succeeded after the death of their major opponents (Fisher died in 1962, and Carnap in 1970). In particular, induction was banned, and *mathematical* statistics superseded semantic reasoning to an extent that even analyzing given sets of data became suspicious.

Since the 1970s, many statisticians, scientists and philosophers have worked on overcoming this distorted view (e.g., Tukey (1977), Hedges und Olkin (1985), Ghosh (1988), Schmidt (1992, 1996), Berthold und Hand (2003), Jaynes (2003), Heckman (2005), Howson und Urbach (2006), Rissanen (2007), Hurlbert and Lombardi (2009), Pearl (2009), Ellis (2010), Bookstein (2014)). Perhaps since the "big questions" thus demanded much attention, rather elementary facts like those pointed out in this contribution could be overlooked easily.

It is most significant that due to the law of large numbers, the distance between sample and population shrinks (quickly) when n gets larger. This basic insight makes testing an easy problem: Given enough data - and thus information - the true distribution comes into focus almost inevitably. Therefore, mathematically, all approaches based on the straightforward ratio $P_K(X = x)/P_H(X = x)$ lead to unequivocal and strong convergence results. In other words, sufficiently precise and distinct hypotheses can be tested efficiently, at least, if the hypotheses are treated in a rather symmetric way (Royall 1997, Robert 2007).

On a larger scale, putting information first gives sound answers to quite a few questions. For example, if there is an uncountable number of hypotheses, e.g., a parameterized family of distributions $P_\theta(x)$, Fisher's likelihood function $L_{\mathbf{x}}(\theta)$ provides the key to an elegant solution, which can be extended to an enormously general and powerful information-oriented approach that is perfectly compatible with scientific common sense (e.g., Aldrich (1997), Burnham and Anderson (2002), Li and Vitányi (2008)).

Finally, it should be mentioned that particular formal treatments are associated with certain schools of thought - and it is rather the detailed treatment that triggers the overall attitude than vice versa (methods first, philosophy second). Therefore, quite straightforwardly, an elegant mathematical treatment comes with a "moderate" and reasonable standpoint, whereas questionable decisions lead to rather "extremist" paradigms. The above exposition demonstrates that it may take decades - filled with excessive discussions ranging from formal minutiae to philosophical principles - to overcome popular, yet distorted, points of view.

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