Assessment Of Emotional Intelligence Dimensions Among University Freshmen In South-South Nigeria

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ABSTRACT

This study was designed to assess Emotional Intelligence (EI) dimensions among university freshmen in South-South Nigeria in terms of the influence of gender, school type and students' major discipline. To achieve the objectives of the study, four research questions were posed and four hypotheses were formulated. The design applied towards the conduct of this study was ex post facto research design. A total of 800 students were randomly selected using purposive sampling, simple random sampling, and stratified random sampling techniques. A 30-item questionnaire, the Emotional Intelligence Questionnaire for University Students (EIQUS) developed by the researchers which has a high validity and internal reliability coefficients ranging from .73 to .78 was used to collect data for the study. Independent t-test, One-way Analysis of variance (ANOVA), three-way ANOVA, Fisher's LSD and Scheffe's test for multiple comparisons were the statistical tools deployed to analyze the data. The summary of the findings showed that gender influences the EI of freshmen with the exception of social awareness and relationship management dimensions. School types (Private, State or Federal) do not significantly influence the overall emotional intelligence of freshmen. Furthermore, students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) significantly influence the emotional intelligence of freshmen in universities in South-South Nigeria. In addition, the post-hoc comparison for significant differences showed that some pairs are significant in each of the dimensions with the exception of the pairs in relationship management which showed no significant difference in any of the pairs. Also, the interaction effect of gender, school types (Private, State or Federal) and students major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of freshmen was significant. It was recommended that university authorities should pay attention to the concept of EI in view of it benefit in an academic environment.

Key words: Emotional intelligence, Freshmen, South-South Nigeria

INTRODUCTION

Intelligence according to Galton (as cited in Lahey, 2003) is the cognitive abilities of an individual to learn from experience, to reason well, and to cope effectively with the demands of daily living. Writing further, Galton proposed a single general factor (g, a term used by Spearman & Wynn-Jones, 1950) that provides the basis for more specific abilities that each of us possesses. Cattell (1963) theorized that intelligence which is the basis of all other human characteristics is composed of two general factors: fluid intelligence (gf) and crystallized intelligence (gc). The gf is general to many different fields and is for adaptation to new

situation. The gc which is crystallized general mental ability indicates the extent to which an individual has appropriated the collective intelligence of his culture for his own use; and of course, this is largely dependent upon that person's fluid intelligence, for he must have the basic capacity to appropriate that which at one time must have been novel to him.

According to Asim, Bassey and Umoren (2007) human intelligence is so important that the "Encyclopaedia of Human Intelligence" has been devoted exclusively to its discussion. Nevertheless, because of the divergent views about the actual definition of intelligence, Gardner (1983) proposed the concept of multiple intelligences. According to Gardner, intelligence is beyond one being able to read, write and solve arithmetic problems. He maintains that intelligence covers a broad spectrum of areas and every person is intelligent in one or more of these areas. Gardner suggested that there are eight independent types of intelligence namely; linguistic (verbal) intelligence, logical-mathematical intelligence, musical intelligence, spatial (artistic) intelligence, kinaesthetic (athletic) intelligence, interpersonal (social skills), intrapersonal (personal adjustment) and naturalistic intelligence. Gardner's definition of intelligence is much broader than the traditional one, because Gardner believes that great skill in music and good emotional adjustment should be said to reflect intelligence just as much as skill in mathematics. Consequently, it follows that it takes intelligence to be able to handle our emotions in the right order in our daily encounter. To be intelligent, in this light, puts emotions at the centre of aptitude for living. Bringing intelligence into our emotions is called emotional intelligence. This construct (Emotional Intelligence-EI) is the type of intelligence the researchers of this topic is interested in.

Emotional Intelligence (EI) has been viewed differently by different scholars and authors in the past, notable among them are; Gardner, Salovey along with Mayer, Goleman and Bar-on, to mention but a few. Nevertheless, to give a working definition of EI, the definition given by Goleman is here presented. According to Goleman (1995, p.3), emotional intelligence can be defined as, "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in us and in our relationship".

Emotional Intelligence plays a key function in shaping achievement in school, business arena, relationships, career pursuit, and as well as life generally. Research have proven that persons with high level of EI have less health crisis, good positive mood, more positive interactions with friends and family (Brackett & Mayer, 2003). Emotional Intelligence is important in organizational development and in developing people, because the emotional intelligence quotient principle provides a new way to understand and assess people's behaviour. EI can be used to assess people's management styles, attitudes, interpersonal skills and potentials. EI is also important because, it is involved in human resources planning, selection and placement of students into different ability groups. EI helps in harnessing marriage, promoting effectiveness, satisfaction and productivity of people at work. EI also, helps to reduce or eliminate prejudices among people, heightened collective creativity and entrepreneurial energy and provides ways in helping people learn together on how to work more effectively. In the educational sector, emotional intelligence is also deployed in predicting success in academics.

Emotional Intelligence is considered important in job profiling, recruitment interviewing and selection; students with higher levels of EI are reported to be less aggressive and more pro-social than their peers with low EI. Emotionally intelligent teachers are able to accommodate all categories of students. The high standards attained by some teachers in the classroom have been attributed to the emotional bonds they establish with, and the emotional goals they set for their students (Hargreaves, Earl, & Moore, 2000; Hargreaves, 2001). If the teacher is emotionally moody, prejudiced, and over strict, an unhealthy emotional environment will be

created, and the students might become withdrawn. Furthermore, customer service personnel with high EI are said to be more effective and have better relationships with their customers than those with lower EI (Brackett & Mayer, 2003).

However, the best use of EI is to help people identify their own and others' emotions, regulate their emotions, identify how people managed relationships and adapt to environmental changes or coping with environmental demands. In all, Asim and Promise (2012) captured the whole cause and effect relationship of EI on the life of an individual in a more succinct manner.

According to Asim and Promise (2012, p.34), "the root causes of low level of EI in an individual starts with needs which require attention, and attention which trigger up emotions, emotions which could be positive or negative feelings such as getting the needs met, taking self responsibility, dismissing the pressing needs, somebody responsibility to meet needs and not attending to pressing needs". These situations may trigger anger, anxiety, self defeat, fear, unforgiveness, low self esteem, fixed blame, shame, not taking personal responsibility, etc. Nonetheless, the resulting effects of taking self responsibility which equates to EI in turn generates the following consequences: Bolster productivity, quality products, quality services, economic boom, success in business, employment opportunities, success in school, success in jobs, effective working relations, problem solving abilities, trusting others, intimacy, feeling safe, stress reduction, peace, well-being and good health, ability to make better decisions, etc.

On the other hand, one with low level of EI which is equivalent to emotional trouble, generates the following consequences: Broken marriages (divorces), malfunctioning homes, sense of insecurity, alcoholism or drug abuse, school dropout, rapists, self-harm, aggressive behaviour, examination malpractices, violence, militancy, terrorism, loss of lives, increase cost of health, economic loss, depression, memory loss, insomnia, fatigue, heart disorder, muscle tension, stroke, hypertension and renal failure.

Unfortunately, society is bedeviled with myriad of personal-social ills ranging from hatred, rape, kidnap, violent crime, students' unrest, strike, civil unrest, religious extremism, militancy, terrorism, killing, unwanted teenage pregnancies, peer pressure to have sex, increase in mental illness, withdrawal or social problem such as: preferring to be alone, feeling unhappy, being overly dependent etc, anxiety and depression of all fashions, attention and thinking problems, delinquent or aggressive behaviour to mention but a few, even amongst graduates of our tertiary institutions.

Graduates of tertiary institutions, as at the point of graduation are presumed to be found worthy in character and learning for having gone through higher institutions that are supposed to be citadels of learning and good character building for the future leadership role of youths in the society. This means that when individuals leave tertiary institution they are supposedly, intellectually, spiritually, emotionally and physically adjusted in fulfilment of the objective of tertiary institution as enunciated in the National Policy on Education. However, this is not the case. Some researchers have attributed some of the above mentioned personal-social ills to some other factors such as poor education (Justice, 2005), low socioeconomic status (Sangeeta & Chirag, 2012), lack of good self concept (Opara & Onyekuru, 2013), lack of intelligence (Pancer, Hunsberger, Pratt & Alisat, 2000), poverty (Sangeeta & Chirag, 2012), personality disorder (Hiroshi, 2011), poor parental care/style (Backhaus, 2009), family background (Backhaus, 2009) and the host of others.

All the ills mentioned in the course of this background border on ones' ability to control ones' emotions and understand the emotions of other persons, with a view to managing them

effectively and efficiently so as to bring about peaceful cohabitation. When peaceful cohabitation among people in a given society is not the prevailing situation, low level of emotional intelligence (EI) can be said to have set in. In addition, this condition becomes very precarious if university graduates are perceived to be low in EI, bearing in mind that they are future leaders. Consequently, it is against the above background, the researchers deems it fit to assess the Emotional Intelligence (EI) dimensions of freshmen in universities along the lines of their gender, school types in terms of private, state or federal and students' major discipline with regards to the major faculties the students are studying in their various universities.

Theoretical framework
This study was hinged on the following theories:
    (a) Ability based emotional intelligence theory
    (b) Mixed models theory of emotional intelligence
    (c) Trait emotional intelligence theory

Ability based emotional intelligence theory
Ability based emotional intelligence theory is a psychological theory of emotional intelligence developed by Peter Salovey and John Mayer in 1990. The theory conceptualized Emotional Intelligence (EI) within the framework of a new intelligence. This theory, viewed EI, as the ability to distinguish and create passion with a view of buttressing thinking.

The theory conceived emotions as practical supply of information intended to assist in making sense and pilot social surroundings. In this light, supposition suggests that persons contrast in the act of processing information that is emotional in nature and their capability to communicate emotional dispensation to versatile cognition.
Four types of abilities are presented by the theory namely:
1. Perceiving emotions – ability to detect and decipher emotions in faces, pictures, voices, and cultural artifacts; including the capability to identify one's own emotions. This is a central aspect of emotional intelligence, as it makes all other dispensation of emotional information possible.
2. Using emotions – the ability to exploit emotions; facilitate various cognitive activities, like thinking and problem solving. The emotionally intelligent person could receive merits of changing moods in maximizing the assignment given.
3. Understanding emotions – knowledge of emotional verbal communication and acknowledge intricate relationships among emotions. For instance, understanding emotions encompasses the aptitude to be insightful toward slight variations involving emotions, skill to be aware of and tell how emotions evolve over time.
4. Managing emotions – acumen to regulating emotions in ourselves and others. It then follows that; emotionally intelligent individuals can harness and manage emotions with a view of achieving anticipated objectives.

Mixed models theory of emotional intelligence
This theory was propounded by Daniel Goleman in 1995. According to Goleman, Emotional Intelligence (EI) refers to the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in us and in our relationships. The theory describes abilities distinct from, but complementary to, academic intelligence, the purely cognitive capacities measured by Intelligence Quotients (IQ). The casual shorthand for EI as given by Goleman is Emotional Quotients (EQ). In addition, Goleman in 1998 outlined four aspects of EI construct:
1. Self-awareness – the ability to interpret one's emotions and recognize their impact while using gut feelings to channel decisions.

2. Self-management – involves controlling one's emotions and impulses and adapting to changing circumstances.
3. Social awareness – the ability to sense, understand, and react to others' emotions while acknowledging social networks.
4. Relationship management – the ability to motivate, persuade, and develop others while managing conflict.

In explaining further the construct, Goleman included sets of emotional competencies within each construct of EI. These are emotional self-awareness, accurate self-assessment, self-confidence for self-awareness construct. Compliance, keeping troublesome emotions and impulses in check, thoroughness and reliability, initiative and innovation and achievement drive all for self-management dimension. Social awareness construct or dimension of EI has four competencies, namely: Empathy, service orientation, organizational awareness and developing others. The fourth construct or dimension of EI according to Goleman is Social skills with seven competencies, namely: Leadership, influence, change catalyst, communication, conflict management, collaboration and building bonds and team capabilities. Furthermore, Goleman emphasized that emotional skills are not inborn gifts, but cultured capabilities that require nurturing and development to achieve exceptional feat. It is also the position of this theory that people have general emotional intelligence which determines their potentiality in acquiring emotional competency.

Trait emotional intelligence theory
This theory of emotional intelligence was developed by Konstantin Vasily Petrides in 2001, and it encompasses behavioural dispositions and self perceived abilities and is measured through self report. The theory is a theoretical distinction between the ability based theory of emotional intelligence and the trait based theory of emotional intelligence. According to the theory, Trait emotional intelligence is a collection of emotional self-perceptions situated at the lesser levels of personality. Put differently, trait emotional intelligence means individuals' self-perceptions of their emotional abilities. This description of emotional intelligence includes behavioural dispositions and self-perceived abilities and is measured by questionnaires, as opposed to the ability based theory which explains actual abilities, which have demonstrated high opposition to scientific measurement.

Trait emotional intelligence theory was also structured along four scopes, namely: well-being, self-control, emotionality and sociability. These four factors gave birth to 15 different sub-factors, and they include: Adaptability, assertiveness, emotion perception, emotion expression, emotion management, emotion regulation, impulsiveness, relationship, self-esteem, self-motivation, social awareness, stress management, trait empathy, trait happiness, and trait optimism.

However, in the present study the researchers explored the different instruments that are used to measure EI, considering all its dimensions and facets as presented in theories and literature. That is, the instrument for this study consisted of items used in testing or measuring EI as presented by the theories discussed above.

Statement of the problem
The idea of Emotional Intelligence (EI) which is described as the ability of one to perceive emotion, integrate emotion to facilitate thought, understand emotions and to regulate emotions to promote personal growth and relationship can be regarded as a source of information that helps one to make sense of and navigate the social environment as reported in literature. Nevertheless, humans have continued to show low level of EI, which poses some

challenges to the individual and others. The decline in EI among adolescents and young adults manifests problems such as despair, alienation, drug abuse, crime and violence, bulling and dropping out of school. Some problems arising from low level of EI include; lack of understanding of how people perceive one, which may affect their reactions towards you and this, may be positive or negative.

In addition, recent research has shown that children, especially students, are growing lonely and depressed, more angry and unruly, more nervous and prone to worry, more impulsive and aggressive. People who do not have the capacity to regulate their own emotions may become slaves to them. In addition, individuals who make others feel unhappy or badly in certain situations may be perceived as cloddish or oafish and ultimately be hated. A more common problem involves people who cannot recognize emotions in themselves and are therefore unable to plan lives that fulfill them emotionally especially amongst university undergraduates and graduates.

While studies investigating emotional intelligence using any of the theories mentioned earlier have been extensively reported in literature, very few if any have focused or tested the theories in the context of university freshmen. In particular, study validating the dimensions in the context of university freshmen in South-South Nigeria is still not available. Hence, the problem of this study is to provide answers to this question: what is the influence of gender, school type and major discipline on emotional intelligence dimensions of university freshmen in South-South Nigeria?

Objectives of the study
Specifically, the objectives of this study were four-fold: To determine:
1. The influence of gender (male and female) on the emotional intelligence of freshmen.
2. The influence of school type (Private, State or Federal) on the emotional intelligence of freshmen.
3. Whether students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) influences their emotional intelligence.
4. The interaction effect of gender, school type (Private, State or Federal) and students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of freshmen.

Research questions
1. What is the influence of gender on emotional intelligence of university freshmen?
2. What is the influence of school type (Private, State or Federal) on the emotional intelligence of university freshmen?
3. What is the influence of students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of university freshmen?
4. What is the interaction effect of gender (male and female), school type (Private, State or Federal) and students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of university freshmen?

To provide answers to the above questions, each research question was transformed into a null hypothesis as presented below.

Statement of hypotheses
The following null hypotheses were tested in this study at .05 level of significance:

1. Male and female fresh-students do not differ significantly in their emotional intelligence.
2. School type (Private, State or Federal) does not significantly influence university freshmen's emotional intelligence in South-South Nigeria.
3. Students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) does not significantly influence their emotional intelligence.
4. The interaction effect of gender (male and female), school type (Private, State or Federal) and students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of freshmen in South-South Nigeria universities is not significant.

LITERATURE REVIEW
Azuka (2012) studied the relationship between emotional intelligence and academic achievement of senior secondary school students in the Federal Capital Territory, Abuja Nigeria. To steer the investigation research questions were posed, hypotheses formulated. Design for the inquiry was correlational. The instruments used for data collection are emotional intelligence inventory and mathematics achievement test. EI inventory had a reliability coefficient of 0.79 while that of MAT was 0.94. Proportionate stratified sampling technique was used to draw a sample of 1, 160 students from a population of senior secondary two in public schools. Mean and Pearson Product Moment Correlation served as statistical tools. To test significance of the correlation coefficient, t-test was engaged. Outcome of the analysis revealed there was significant but low positive relationship between emotional intelligence of SS2 male, female, urban and rural school with academic achievement in mathematics. The project concluded aside, cognitive factors, emotional intelligence also affects academic achievement in mathematics. Consequently, emotional intelligence training be incorporated into school curriculum was recommended.

In the same vein, Pablo, Rosario, Ruth, and Natalio (2012), worked on the topic gender differences in emotional intelligence: The mediating effect of age. Some questions asked included; Are women more emotionally intelligent than men? Is this a correct impression or yet another stereotype? To tackle these questions, Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), was adopted. A new standpoint was taken in this project by controlling for age, which is one of the prime socio-demographic properties that interacts with gender as well as EI, in order to make clear how gender affects EI. Sex variation initially reported for EI is mediated completely by age and partially in favour of emotional managing. There is therefore, carefulness when deducing gender affects EI in the absence of trials for possible interactions between gender and other attributes that may sway EI.

In 2011, Hiroshi researched on the topic, differences in relationship between emotional intelligence and self-acceptance as function of gender and *Ibasho* (a Person Who Eases the Mind) of Japanese undergraduates. Here, the *ibasho* represents the person who eases one's mind. The respondents were 244, and they were asked to fill the Japanese version of Emotional Intelligence Skills and Competence Questionnaire (J-ESCQ; Toyota, Morita, & Takšić, 2007). Positive correlations between minor pair abilities of EI (perceiving and understanding emotion (PU), expressing and labeling emotion (EL), managing and regulating emotion (MR), as well as self-acceptance) were found in females whereas in males, the only positive correlation was found between MR and self-acceptance. For participants who report that 'lover' is a person who eases their mind, PU has a negative correlation with self-acceptance. Both EL and MR have a strong correlation with self-acceptance in all types of groups. These results indicates that the effect of each sub-ability in EI on self-acceptance is determined by gender and the presence of

the person who provides a sense of *ibasho* and also suggest that these determinants should be considered to clarify individual differences in adaptation.

Summiya, Hayat, and Sheraz (2009), looked at emotional intelligence and gender differences. The research sample comprised of 160 (80 for each of male and female) individuals. Snowball sampling technique was used to draw subjects. Emotional Quotient Inventory (EQ-I) engaged to quantify emotional intelligence among the subjects. Gender difference on EQI exposes high emotional intelligence for male compared to females.

Also, Samer, Ahmad, Aieman, and Abdullah (2007), researched on the topic, assessing the level of emotional intelligence among Future Vocational Workforce in Jordan. A total of 150 vocational students participated in the study by completing the emotional intelligence scale (EIS). The results indicated that vocational students have an acceptable moderate level of emotional intelligence on the five dimensions. Moreover, there were no significant differences between dimensions of emotional intelligence and the proposed demographic variables (gender and area of specialization). Finally, several recommendations were suggested for improving emotional intelligence among vocational students that can contribute to better job performance.

In a study conducted by Rivera (2003) on Puerto Rican men and women working full or part time and attending college part time using emotional competency inventory-University (ECI-U), found that there was important difference when the sample was separated by gender. Working men showed 8 of the competencies more at work than at home (emotional self-awareness, accurate self assessment, emotional self-control, trustworthiness, conscientiousness, service orientation, change catalyst, and building bounds) while women showed 9 competencies more at home than at work (self confidence, trustworthiness, adaptability, service orientation, organization awareness, inspirational leadership, communication, conflict management and teamwork).

Mayer, Caruso and Salovey had in 1999 opined that, females may have a slight advantage over males in the locale of EI. A year after, Bar-On, in his study found out no significant difference between man and woman as far as total emotional and social competences are concerned. Bar-On additionally stated that women are additional awake emotionally, display extra empathy, transmit superior inter-personally, as well as supplementary publicly dependable than men who are self-regarded, hack it positively stress, solve problems healthier, and further subsist independently, flexibly, also optimistically. In broad spectrum, ratings of men and women show much similarity than differences on the subject matter and so, in provisos of total emotional intelligence, no gender difference exist Goleman concluded.

Nazan, Gungor, Abdullah, Bilal, Ergul, Hanife, Rukiye and Secil (2013), investigated emotional intelligence and the characteristics of students studying at various faculties and colleges of Çanakkale Onsekiz Mart University. Questionnaires were administered to students studying at five different faculties. The outcome of the research revealed that there was no significant difference between the faculty of students and their emotional intelligence, besides sociability. Also about 11 % of the changes in academic achievements are attributable to emotional intelligence.

RESEARCH METHODOLOGY

Design

The plan or blueprint used for conducting this investigation was ex-post facto design. Ex-post facto research is essentially a systematic empirical inquiry in which the researcher does not

have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulable (Kpolovie, 2010). This design was used in the present study because the researchers collected data from a representative sample of a large population of freshmen in universities located in South-South Nigeria with the intent of assessing how their gender, school types and major disciplines (already existing levels of independent variables) influences their emotional intelligence dimensions (dependent variable).

Study area
The study area is South-South Nigeria. South-South Nigeria is a geopolitical area so named by the politicians of the country for administrative convenience and identification that has come to stay over time. The area is located in the deltaic region of the country which is the core south of the country bordering the Atlantic Ocean. The south-south geo-political region, Nigeria is the third largest Wetlands in the World behind Mississippi and Pantanal (NDDC, 2003). The zone embraces 70,000 square kilometers of land with peculiar and intricate terrain. The 2007 census conducted by the National Population Commission (NPC) put the population of South-South Nigeria at 14,400,000.

The zone Eastern part has Republic of Cameroon, South-West section Ondo State, North-West Kogi/Benue States, and South-East by Imo, Ebonyi with Abia States. Furthermore, the area lies between Latitude 04^0 15' and 05^0 15' North of the Equator and Longitudes 08^0 15' and 08^0 30' East of the Greenwich Meridian.

The area consists of six states of the Nigeria federation namely; Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers states. These six states jointly constitute the bee-hive of the oil and gas industries of the country and contribute about 89% of the country' resources (NDDC, 2003). All the inhabitants of the area do not speak a common language, but the Ijaw language appears to be predominant. In view of the high concentration of important industries in the area the presence of the federal government of the country is remarkably noticed by the existence of her machineries, ministries and agencies.

The area is saturated with primary and secondary schools owned by government, private individuals and organizations such as churches. As at the time of this investigation, there are six federal universities, six state owned universities and three privately owned universities in the area. Thus, South-South Nigeria is appropriate for the study because adequate sample size is assured based on the large population size of freshmen.

Population
Target population for this investigation comprised entire year one students admitted into the 11 universities in south-south Nigeria for the 2012/2013 academic session. As at the time of the study, there were 25, 186 year one students in the universities. (Source of the population was the National Universities Commission-NUC website, 2013).

Sampling technique
The sampling techniques used in this study are a combination of purposive sampling, simple random sampling, and stratified random sampling techniques. As at the time of this study only 11 universities were having functional year one students. Two of the universities were private universities; four were Federal universities while the remaining five were State universities. In addition, two each of the universities are in Rivers state and Cross River, four in Edo state and one each in Akwa Ibom, Delta and Bayelsa states. The six states that make-up the south-south region of Nigeria.

However, purposive sampling technique was used in three stages. In the first stage, five states namely; Cross River, Akwa Ibom, Rivers, Delta and Bayelsa states were selected. At the second stage, one university in each state was selected and in the third stage, one faculty was selected from each of the universities selected in stage two of the purposive sampling, corresponding to five faculties. The faculties were: faculties of Arts/Humanities, Engineering, Education, Medical Science and Sciences.

Using stratified random sampling technique, with departments as the basis for stratification, one hundred and sixty (160) year one students were selected from each faculty. In each faculty, simple random sampling technique (use of slips of paper with replacement) was adopted using the list (matriculation number and names) of the students in that faculty. The matriculation numbers which corresponded with the names of the students were written on the slips of paper. The slips were folded and put in a container. After thorough reshuffling, the researcher, not looking into the container, dipped his hand and picked one slip. He unfolded the slip, recorded the name of the student it contained, folded it again and put it back into the container. This process was repeated until the required numbers of students in that faculty were drawn. This was done in the five faculties until the 800 students as sample for the study, were drawn.

Sample
The sample size of this study was 800 freshmen (year one students as at the time of this study) made up of 373 male and 427 female students. From five universities in five states namely; Akwa Ibom, Delta, Bayelsa, Rivers and Cross River states. The students selected cut across five faculties; faculty of Art/Humanities, Engineering, Education, Medical Sciences and Sciences.

Instrumentation
The instrument deployed for this study was constructed by the researcher. The construction of the instrument was based on the knowledge derived from literature (Petrides, 2001; Goleman, 1998; Mayer & Salovey, 1995). The instrument was a questionnaire named: Emotional Intelligence Questionnaire for University Students (EIQUS) (Appendix A). The EIQUS has two major parts, Part A and Part B. Part A elicited from the respondents personal/demographic information such as gender, school types and faculty of study. Part B on the other hand sought information on the emotional intelligence of the subjects.

Part B of the instrument was a 30-item Likert type scale designed to measure dimensions of Emotional Intelligence (EI) of the respondents (university freshmen). It consisted of five sections covering the five dimensions of EI namely: social awareness with six questionnaire items, self awareness with seven questionnaire items, self control with six questionnaire items, relationship management (social skill) with seven questionnaire items and self management with four questionnaire items.

All the 30 items of Part B were of the modified Likert type on a four-point scale. The four points for positive items were: Strongly Agree (SA) = 4points; Agree (A) = 3points; Disagree (D) = 2points and Strongly Disagree (SD) = 1point. The points were reversed for negative items. However, to avoid set responses and biased reaction to a particular dimension of EI on the part of the respondents, the items of the instrument were not presented in sections as explained above but rather, items measuring various dimension were mixed up.

Qualities needed to be established for a research instrument (questionnaire) prior to use are 'validity' and 'reliability' indices.

Two kinds of validity were established for the instrument for this study. These were 'face validity' and 'content validity'. Face validity refers to the superficial appearance of the items in an instrument. While, content validity simply means the extent to which the items of an instrument represents the content of interest, or how well the items on an instrument represent or sample the content to be measured (Joshua, 2005). Both validity types cannot be expressed mathematically, but are usually obtained by inspection and scrutiny of the items by experts (Kpolovie, 2010).

For the establishment of face validity of the instrument (EIQUS), four copies of the instrument were given to four different experts in educational research, measurement and evaluation, to study and then indicate what it appears to measure superficially. The instrument was developed to measure some dimensions of EI of university freshmen such as social awareness, self awareness, self control, relationship management (social skill) and self management; hence it is a compound instrument. After thorough reading, the experts confirmed that the instrument was a true measure of EI mentioned above. It stands to reason that the instrument has face validity which refers to what an instrument appears superficially to measure.

Content validity of EIQUS was determined in two phases. During the first phase, some copies of the instrument were given to four experts of educational research, measurement and evaluation to make their own inputs. They were requested to help the researcher improve on the content coverage of the instrument by including additional suitable items for each dimensions of EI contained in the various sections of the instrument which was a compound one. Giving the instrument to experts for such inputs would enlarge the content extensively of each dimension and thus enhance the content validity of the whole instrument. The topic of the study, statement of the problem, purpose of the study with its specific objectives, research questions and hypotheses, were attached to copies of the instrument given to experts. The practice would help to guide the experts in whatever contributions or inputs they would want to make towards increasing the constituent items of the instrument.

During the second phase, improved copies of the EIQUS were given to other experts in Educational Psychology to indicate the degree of suitability or relevance of the items of the instrument. Included for the experts' attention were the topic of the study, aim of the study, research questions and hypotheses. This practice would constitute a guide to the experts for checking the degree of relevance or appropriateness of the items in measuring what the instrument purports to measure. The experts were demanded to rate the items on a 4-point scale weighted as shown below:
Not relevant = 1point
Some-what relevant = 2points
Relevant = 3points
Very relevant = 4points

The experts' ratings for each item were analyzed with mean. Any items with mean rating of 3 and above, representing 'Relevant' and 'Very relevant' were included in the final draft of the instrument while those with mean ratings below 3 were dropped. All these operations were carried out by the researcher in order to achieve high content validity for the apparatus.

In ascertain reliability of the instrument (EIQUS), questionnaires were administered on 40 university freshmen (students) drawn from two universities that were not part of the study. Cronbach alpha reliability coefficients were computed for each of the five sections of Part B and for the entire Part B of the instrument EIQUS (the sections actually measured the dependent variables of the study).

Cronbach alpha technique is one of the internal consistency measures which depict the degree the instrument items are internally consistent in measuring variables of interest (Isangedighi, Joshua, Asim & Ekuri, 2004). For the above purpose, the data obtained from the copies of the questionnaire presented to the 40 students were subjected to statistical analysis via Cronbach alpha with the deployment of SPSS for Window version 15. The derived values which range from .73 to .78 were high and so guarantee deployment of the instrument.

Procedure for data collection
Research instruments were administered directly by the researcher. In each university the researcher got the list of students in the office of the Dean of the Faculty selected for the study after proper identification and purpose for the data collected. The researcher then visited the students in class during a faculty course. After obtaining due permission from the lecturer, the researcher explained the objectives of the study to the respondents and also solicited their co-operation. The respondents were assured that all information collected would be used only for research purposes. After this 160 respondents were randomly selected for the study and were subsequently presented with a copy each of the questionnaire.

Completed copies of the questionnaire were collected by the researcher on the spot in a bid to ensure high return rate for the instrument. However, the assistance of Research Assistants was solicited for the administration and collection of the questionnaire from the respondents. 99 percent return rate for the questionnaire was achieved in the course of data collection for the study.

Data analysis
For data analysis, hypothesis one analyzed with independent t-test, hypotheses two and three analyzed with one-way analysis of variance (ANOVA) while, hypothesis four was analyzed with multi-factor analysis of variance (ANOVA) (2 X 3 X 5-three-way ANOVA).

Operational definition of variables
Self Awareness: This refers to knowing one's internal states, preferences, resources, and intuitions. This was measured by the sum of responses to items 3, 5, 9, 12, 20, 24 and 27 in Part B of EIQUS questionnaire.

Self Management: This refers to managing one's internal states, impulses, and resources to facilitate reaching goals. It was measured by the sum of responses to items 8, 14, 18 and 23 in Part B of EIQUS questionnaires.

Self Control: This refers to student's ability to behave calmly and sensibly when faced with emotionally disturbing situation. This was measured by the sum of responses to items 4, 7, 15, 19, 22, and 30 in Part B of EIQUS questionnaire.

Social Awareness: This implies awareness of others' feelings, needs, and concerns. This was measured by the sum of responses to items 1, 2, 13, 16, 17, and 28 in Part B of EIQUS questionnaires.

Relationship Management: This implies proficiency at inducing desirable responses in others, collaboration and building bonds as well as creating group synergy in pursuing goals. It was operationalized as student's responses to the sum of items 6, 10, 11, 21, 25, 26, and 29 in Part B of EIQUS questionnaire.

Emotional Intelligence: Student's ability to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope for a better future. In fact all the brief meaning given to the five dimensions stated above. It is the sum total of student's responses on items 1-30 (overall emotional intelligence) in Part B of the EIQUS questionnaire.

RESULTS

Hypothesis one
Male and female fresh-students do not differ significantly in their emotional intelligence.

Table 1: Independent t-test analysis of male and female difference on EI

Dimensions	Gender	N	Mean	SD	t	df	Sig
Self awareness	Male	365	24.66	3.191	2.275*	790	.023
	Female	427	24.19	2.722			
Social awareness	Male	365	7.90	1.165	-.470	790	.639
	Female	427	7.94	1.203			
Self-control	Male	365	10.23	1.528	-3.110*	790	.002
	Female	427	10.56	1.474			
Self management	Male	365	8.90	2.444	8.355*	790	.000
	Female	427	7.48	2.304			
Relationship management	Male	365	8.81	.941	.957	790	.339
	Female	427	8.73	1.280			
Total EI score	Male	365	60.50	5.244	4.613*	790	.000
	Female	427	58.90	4.483			

*p < .05

The result presented in Table 1 showed the various mean values for male and female students on each of the dimensions of EI. These results showed calculated t-values as follows:
Self awareness = 2.275*
Social awareness = -.470
Self control = -3.110*
Self management = 8.355*
Relationship management = .957
Total emotional intelligence = 4.613*

From the above results, the calculated t-values of social awareness and relationship management are not significant. The null hypothesis was therefore retained (not rejected) for social awareness and relationship management. This therefore means that, male and female fresh-students do not differ significantly in their emotional intelligence with respect to social awareness and relationship management dimensions.

The calculated t-value for self awareness (2.275), self control (-3.110), self management (8.355) and total EI (4.613) are all significant. Following this, the null hypothesis was rejected and its alternative upheld for these dimensions. This means that male and female fresh-students do differ significantly in their emotional intelligence, with respect to self awareness, self control, self management and total EI. The direction of significance is in favour of male students with respect to self awareness, self management and total EI, but in favour of female students with respect to self control.

Hypothesis two
School type (Private, State or Federal) does not significantly influence university freshmen's emotional intelligence in South-South Nigeria.

Table 2a: Analysis of variance table showing the influence of school type of respondents on the EI of university freshmen

Dimensions	Group	N	Mean	SD
Self awareness	Federal	103	24.51	2.104
	State	546	24.43	3.057
	Private	143	24.22	3.091
Social awareness	Federal	103	7.38	1.456
	State	546	8.01	1.089
	Private	143	8.01	1.225
Self-control	Federal	103	10.63	1.657
	State	546	10.47	1.367
	Private	143	10.01	1.817
Self management	Federal	103	7.90	2.256
	State	546	8.03	2.510
	Private	143	8.71	2.396
Relationship management	Federal	103	8.55	.936
	State	546	8.69	1.098
	Private	143	9.22	1.295
Total EI score	Federal	103	58.98	4.078
	State	546	59.62	4.871
	Private	143	60.17	5.542

Dimensions	SV	SS	df	MS	F-ratio	Sig
Self awareness	Between groups	6.338	2	3.169	.362	.696
	Within groups	6900.560	789	8.746		
	Total	6906.898	791			
Social awareness	Between groups	35.408	2	17.704	12.992*	.000
	Within groups	1075.197	789	1.363		
	Total	1110.605	791			
Self-control	Between groups	30.142	2	15.071	6.730*	.001
	Within groups	1766.944	789	2.239		
	Total	1797.086	791			
Self management	Between groups	59.682	2	29.841	4.939*	.007
	Within groups	4766.862	789	6.042		
	Total	4826.544	791			
Relationship management	Between groups	36.981	2	18.490	14.814*	.000
	Within groups	984.806	789	1.248		
	Total	1021.787	791			
Total EI score	Between groups	84.758	2	42.379	1.761	.173
	Within groups	18989.964	789	24.068		
	Total	19074.722	791			

*P < .05

In Table 2a the mean for self awareness for Federal (24.51), State (24.43) and Private (24.22) shows an $F_{(2, 789)}$ = .362, p (0.696) > 0.05 level of significance. Therefore, school type does not influence the dimension of emotional intelligence called self awareness. The mean for Social awareness for Federal (7.38), State (8.01) and Private (8.01) show an $F_{(2, 789)}$ = 12.992, p (.000) < 0.05 level of significance. Therefore, school type does influence the dimension of emotional intelligence called social awareness. The mean for Federal (10.63), State (10.47) and Private (10.01) school types for self-control as one of the dimensions of emotional intelligence show an $F_{(2, 789)}$ = 6.730, p (.001) < 0.05 level of significance which indicates that school type influences students' self-control as a dimension of emotional intelligence. The mean for Federal (7.90), State (8.03) and Private (8.71) school types for self management as one of the dimensions of emotional intelligence show an $F_{(2, 789)}$ = 4.939, p (.007) < 0.05 level of significance which indicates that school type influences self management as a dimension of emotional intelligence. The mean for Federal (8.55), State (8.69) and Private (9.22) school types for relationship management as one of the dimensions of emotional intelligence show an $F_{(2, 789)}$ = 14.814, p (.000) < 0.05 level of significance which indicates that school type influences relationship management as a dimension of emotional intelligence. The mean for Federal (58.98), State (59.62) and Private (60.17) school types for overall emotional intelligence show an $F_{(2, 789)}$ = 1.761, p (.173) > 0.05 level of significance which indicates that school type does not significantly influence the overall emotional intelligence of freshmen in universities in South-South Nigeria.

Table 2b shows an analysis of multiple comparisons (Post-Hoc test) via Fisher's least significant difference (LSD) on hypothesis two in view of the fact that we had three groups and some of the dimensions showed overall significance. Thus there was the need to determine exactly where the difference lies among and between the three groups (federal, state and private secondary schools attended) compared in this study. The LSD is a post hoc multiple comparison procedure for determination of pairs of means that are statistically significant by comparing the absolute mean difference in each pair of means with the LSD. Consequently, the analysis in Table 2b indicated that all the pairs compared for self awareness are not significant. For social awareness, the comparison between federal versus state and federal versus state were significant while, the comparison between states versus private was not significant. For self control dimension, federal versus private and state versus private were significant but federal versus state was not significant. Self management and relationship management dimensions followed the trend established in self control earlier. In the case of overall emotional intelligence, no pair was significant because all the significant values are all greater than our chosen alpha level of 0.05 probability level.

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Table 2b: Analysis of Multiple comparisons (Post-Hoc test) via LSD on hypothesis two

Dimensions	Group	Sig	Decision
Self awareness	Federal vs State	.796	NS
	Federal vs Private	.447	NS
	State vs Private	.453	NS
Social awareness	Federal vs State	.000	Sig
	Federal vs Private	.000	Sig
	State vs Private	.998	NS
Self-control	Federal vs State	.313	NS
	Federal vs Private	.001	Sig
	State vs Private	.001	Sig
Self management	Federal vs State	.637	NS
	Federal vs Private	.011	Sig
	State vs Private	.003	Sig
Relationship management	Federal vs State	.260	NS
	Federal vs Private	.000	Sig
	State vs Private	.000	Sig
Total EI score	Federal vs State	.222	NS
	Federal vs Private	.061	NS
	State vs Private	.239	NS

NS = Not significant; Sig = Significant

Hypothesis three

Students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) does not significantly influence their emotional intelligence.

Table 3a: Analysis of variance table showing the influence of students' major discipline on the EI of university freshmen

Dimensions	Group	N	Mean	SD
Self awareness	Arts/Humanities	152	25.88	1.993
	Engineering	160	22.41	2.679
	Education	160	22.66	2.970
	Medical sciences	160	25.90	1.979
	Sciences	160	25.25	2.763
Social awareness	Arts/Humanities	152	7.73	.884
	Engineering	160	7.81	1.304
	Education	160	8.33	1.281
	Medical sciences	160	7.71	.893
	Sciences	160	8.04	1.355
Self-control	Arts/Humanities	152	10.31	.930
	Engineering	160	10.41	1.348
	Education	160	10.16	1.815
	Medical sciences	160	10.37	.949
	Sciences	160	10.78	2.065
Self management	Arts/Humanities	152	6.91	1.917
	Engineering	160	9.43	2.519
	Education	160	8.85	1.774
	Medical sciences	160	6.90	1.927
	Sciences	160	8.53	2.886
Relationship Management	Arts/Humanities	152	8.83	.761
	Engineering	160	8.64	.555
	Education	160	8.74	1.724
	Medical sciences	160	8.80	.751
	Sciences	160	8.83	1.417
Total EI score	Arts/Humanities	152	59.66	3.430
	Engineering	160	58.71	5.811
	Education	160	58.74	5.024
	Medical sciences	160	59.68	3.375
	Sciences	160	61.41	5.791

Dimensions	SV	SS	df	MS	F-ratio	Sig
Self awareness	Between groups	1927.761	4	481.940	76.175*	.000
	Within groups	4979.137	787	6.327		
	Total	6906.898	791			
Social awareness	Between groups	42.639	4	10.660	7.855*	.000
	Within groups	1067.966	787	1.357		
	Total	1110.605	791			
Self-control	Between groups	32.925	4	8.231	3.672*	.006
	Within groups	1766.944	787	2.239		
	Total	1797.086	791			
Self management	Between groups	847.890	4	211.972	41.929*	.000
	Within groups	3978.654	787	5.055		
	Total	4826.544	791			
Relationship Management	Between groups	4.065	4	1.016	.786	.534
	Within groups	1017.721	787	1.293		

	Total	1021.787	791			
Total EI score	Between groups	772.824	4	193.206	8.308*	.000
	Within groups	18301.898	787	23.255		
	Total	19074.722	791			

*P < .05
Total EI score = Total emotional intelligence score

In Table 3a on self awareness, the mean values revealed that medical sciences have the highest mean value (25.90) and engineering had the least (22.41). Furthermore, with $F_{(4, 787)} = 76.175$, $p < 0.05$ is significant. In social awareness, medical science had the least mean value (7.71) while education group had the highest mean value (8.33). The $F_{(4, 787)} = 7.855$, $p < 0.05$ is significant. In the case of self-control, science group had the highest fractional mean value (10.78) while education had the least mean value (10.16). In spite of the fractional mean differences among the five groups, an $F_{(4, 787)} = 3.672$, $p < 0.05$ indicates significant difference among the five groups as it concerns self-control dimension. In self management, engineering had the highest mean value (9.43) and Arts/Humanities had the least mean value (6.91). In addition, $F_{(4, 787)} = 41.929$, $p < 0.05$ is significant. For relationship management, Arts/Humanities and sciences equally had the highest mean value (8.83) with engineering group having the least fractional mean value (8.64). The $F_{(4, 787)} = .786$, p (.534) > 0.05 is not significant. In the case of the overall emotional intelligence, the science group had the highest mean value (61.41) while engineering had the least mean value (58.71). $F_{(4, 787)} = 8.308$, $p < 0.05$ level of significance. This implies that the students major discipline (area of study) (Arts/Humanities, Engineering, Education, Medical Science or Science) does significantly influence the emotional intelligence of freshmen in universities in South-South Nigeria.

Consequently, in view of the fact that the result is significant, a Post-Hoc test via Scheffe test was performed and the result presented on Table 3b. Scheffe test was employed because it is the most versatile post hoc statistical technique for identification of pairs of population means that significantly differ as well as the pairs of means that do not differ significantly. In addition, Scheffe test is suitable for application to any number of groups in an experiment. The present hypothesis had five groups and thus makes the use of LSD inappropriate because LSD is most suitable for only three groups (Kpolovie, 2011). Consequently, in Table 3b the results obtained from the Scheffe test showed significant difference in self awareness between Arts/Humanities versus Engineering, Arts/Humanities versus Education, Engineering versus Medical sciences, Engineering versus Science, Education versus Medical science and Education versus Science, while the rest pairs were not significant. In the case of social awareness dimension, significant differences were found between Arts/Humanities versus Education, Engineering versus Education and Education versus Medical Science. The rest pairs were not significant. For that of self-control only the pair of Education versus Science was significant while the rest pairs were not significant. In the case of self management dimension, the pairs of Arts/Humanities versus Engineering group, Arts/Humanities versus Education, Arts/Humanities versus Science, Engineering versus Medical science, Engineering versus Science, Education versus Medical Science and Medical science versus Science are all significantly different. While the remaining three pairs under self management dimension were not significant. Relationship management dimension had no pair significantly different between groups. However, when all the dimensions are considered together significant difference were found in only four pairs out of the ten pairs and they included that of Arts/Humanities versus Science, Engineering versus Science, Education versus Science and Medical Science versus Science groups.

Table 3b: Analysis of Multiple comparisons (Post-Hoc test) on hypothesis three via Scheffe's test

Dimensions	Group	Sig	Decision
Self awareness	Arts/Humanities vs Engineering	.000	Sig
	Arts/Humanities vs Education	.000	Sig
	Arts/Humanities vs Medical sciences	1.000	NS
	Arts/Humanities vs Sciences	.297	NS
	Engineering vs Education	.945	NS
	Engineering vs Medical sciences	.000	Sig
	Engineering vs Sciences	.000	Sig
	Education vs Medical sciences	.000	Sig
	Education vs Sciences	.000	Sig
	Medical sciences vs Sciences	.255	NS
Social awareness	Arts/Humanities vs Engineering	.983	NS
	Arts/Humanities vs Education	.000	Sig
	Arts/Humanities vs Medical sciences	1.000	NS
	Arts/Humanities vs Sciences	.248	NS
	Engineering vs Education	.004	Sig
	Engineering vs Medical sciences	.964	NS
	Engineering vs Sciences	.561	NS
	Education vs Medical sciences	.000	Sig
	Education vs Sciences	.302	NS
	Medical sciences vs Sciences	.184	NS
Self-control	Arts/Humanities vs Engineering	.985	NS
	Arts/Humanities vs Education	.945	NS
	Arts/Humanities vs Medical sciences	.998	NS
	Arts/Humanities vs Sciences	.111	NS
	Engineering vs Education	.694	NS
	Engineering vs Medical sciences	.999	NS
	Engineering vs Sciences	.322	NS
	Education vs Medical sciences	.823	NS
	Education vs Sciences	.010	Sig
	Medical sciences vs Sciences	.209	NS
Self management	Arts/Humanities vs Engineering	.000	Sig
	Arts/Humanities vs Education	.000	Sig
	Arts/Humanities vs Medical sciences	1.000	NS
	Arts/Humanities vs Sciences	.000	Sig
	Engineering vs Education	.255	NS
	Engineering vs Medical sciences	.000	Sig
	Engineering vs Sciences	.012	Sig
	Education vs Medical sciences	.000	Sig
	Education vs Sciences	.796	NS
	Medical sciences vs Sciences	.000	Sig
Relationship Management	Arts/Humanities vs Engineering	.697	NS
	Arts/Humanities vs Education	.979	NS
	Arts/Humanities vs Medical sciences	1.000	NS
	Arts/Humanities vs Sciences	1.000	NS
	Engineering vs Education	.951	NS
	Engineering vs Medical sciences	.803	NS
	Engineering vs Sciences	.704	NS
	Education vs Medical sciences	.996	NS
	Education vs Sciences	.982	NS
	Medical sciences vs Sciences	1.000	NS
Total EI score	Arts/Humanities vs Engineering	.552	NS
	Arts/Humanities vs Education	.585	NS
	Arts/Humanities vs Medical sciences	1.000	NS
	Arts/Humanities vs Sciences	.036	Sig
	Engineering vs Education	1.000	NS
	Engineering vs Medical sciences	.514	NS
	Engineering vs Sciences	.000	Sig
	Education vs Medical sciences	.548	NS
	Education vs Sciences	.000	Sig
	Medical sciences vs Sciences	.036	Sig

NS = Not significant
Sig = Significant

Hypothesis four

The interaction effect of gender (male and female), school type (Private, State or Federal) and students' major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of freshmen in South-South Nigeria universities is not significant.

Table 4: ANOVA analysis table for the interaction effect

SV	SS	df	MS	F	Sig
Gender	493.064	1	493.064	31.734*	.000
School Type (ST)	70.564	2	35.282	2.271	.104
Students' major discipline (SMD)	1860.438	4	465.109	29.934*	.000
Gender * ST	694.106	2	347.053	22.336*	.000
Gender * SMD	174446.964	4	436.741	28.109*	.000
ST * SMD	4646.025	8	580.753	37.377*	.000
Gender * ST * SMD	572.359	1	572.359	36.837*	.000
Error	11948.410	769	15.538		
Total	2836058.000	792			
Corrected total	19074.722	791			

*Significant, p (0.000) < 0.05 probability level
SV = Source of variation
SS = Sum of squares
df = Degree of freedom
MS = Mean square

In Table 4, $F_{(1, 769)}$ = 31.734, p (0.001) < 0.05 level of significance for gender was significant. For school type, $F_{(2, 769)}$ = 2.271, p (.104) > 0.05 level of probability was not significant. Students major discipline $F_{(4, 769)}$ = 29.934, p (.001) < 0.05 alpha level was significant. The interaction effect of gender and school type had $F_{(2, 769)}$ = 22.336, p (.001) < 0.05 was significant. Gender and students major discipline interaction effect was also significant, $F_{(4, 769)}$ = 28.109, p (.001) < 0.05 level of significant. Furthermore, significant interaction effect was also found between school type and students major discipline with an $F_{(8, 769)}$ = 37.377, p (.001) < 0.05 level of significance. In the case of the interaction effect of gender, school type and students major discipline, $F_{(1, 769)}$ = 36.837, p (.001) < 0.05 probability level was also significant. Therefore, null hypothesis is hereby rejected. This means that the interaction effect of gender (male and female students), school types (Private, State or Federal) and students major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of freshmen in South-South Nigeria universities is significant.

The interpretation here is that when gender, school type and students major discipline are taken together concerning their total EI, the three independent variables jointly have significant influence on freshmen Emotional Intelligence (EI).

DISCUSSION

Gender and emotional intelligence (EI)

The test of hypothesis one shows significant difference for self-awareness, self-control, self management and even in total emotional intelligence. The conclusion here is that male and female fresh-students of the sampled universities in South-South Nigeria did differ significantly in their emotional intelligence dimensions with the exception of social awareness and relationship management.

The outcome was surprising especially as it concerns social awareness and relationship management. The plausible reason for the present finding may be that EI mainly deals with managing and expressing emotions as well as acquiring social skills. Given that females are more inclined to emotional and intimate relationships compared to males, their emotional intelligence is higher. This is perhaps because of the society, which socializes gender differently. Similar finding is the study reported by Dunn (2002) who showed that the female folks scored higher in empathy, social responsibilities and interpersonal relation than males. Girls were extra sensitive in relation with parents, friends and siblings. These qualities help them to attain additional emotional intelligence when compared to boys. The thesis is just a foundational approach to the meadow of emotional intelligence in Nigeria.

Furthermore, it is traditionally established that women are greater recognizable than men in the arena of emotionality (Candela, Barberá, Ramos, & Sarrió, 2001) therefore are naturally ready to identify emotions. Seeing that Baron-Cohen (2002) suggested that variance between men and women may be as a result of "extreme male brain theory of autism", so men "systematize", women "empathize", uses emotions frequently as well as accurately than their opposite counterpart.

However, this result is in agreement with some past research findings. For example, Summiya, Hayat, and Sherah (2009), in a study of Emotional Intelligence and Gender Differences found out that gender difference existed between males and females students with respect to emotional intelligence. Similar results were found in related studies by Pablo, Rosario, Ruth, and Natalio (2012), Azuka (2012), Hiroshi (2011), Rivera (2003) and Mayer, Caruso and Salovey (1999).

However, the studies by Samer, Ahmad, Aieman, and Abdullah (2007), Bar-On (2000) and Goleman (1998) revealed findings inconsistent with the present one. Their results indicated no gender differences in overall emotional intelligence and social competences.

School types and emotional intelligence (EI)

In hypothesis two the influence of school type on EI was sought. The result obtained indicated that school type (Private, State or Federal) does not significantly influence the emotional intelligence of freshmen in universities in South-South Nigeria. That is, irrespective of the secondary schools (private, state and federal owned) attended by the university freshmen, their emotional intelligence is the same based on the overall EI score. However, when the individual dimensions of EI were considered, social awareness, self control, self management and relationship management were significantly influenced by school types in terms of proprietorship (Private, State or Federal) with the exception of self awareness. Furthermore, the post-hoc test via LSD indicated that, self awareness and total EI had no pair significant while in the case of social awareness, the pair of Federal versus State and Federal versus Private was statistically significantly different while that of State versus Private was not statistically significant. In addition, for self control, self management and relationship management dimensions it was found out that statistically significant differences occurred in

the pairs of Federal versus Private and State versus Private but the pair of Federal versus State was not statistically significant.

The above result is quite revealing in the sense that, four out of the five dimensions were significantly influenced by school types while self awareness was not influenced by school type. The fact that one of the dimensions was not significantly influenced, overall EI was also not significant is indeed a surprising scenario. Furthermore, the researcher expected that since the school types of the students were different vis-à-vis the different learning environments of the students especially those in States owned secondary schools, their emotional self awareness would have differed even significantly but this was not the case. A possible reason for students from the three school types showing no significant difference with regard to emotional self awareness may be the foundational training received by the students at primary school level and the socio-cultural environment majority of the students were nurtured. South-south Nigeria where this study was carried out, the socio-cultural background of the peoples' of the area is virtually the same with inter-woven relationship that is highly correlated statistically speaking. Another, reason for the observed finding with respect to emotional self awareness could be that the items in the questionnaire measuring self awareness might have been well comprehended by the respondents and so were responded to with high degree of reliability as reflected in the factors extracted in the analysis via factor analysis.

However for additional discussion to be made, one needs to compare and contrast the present finding with other researchers' findings. Unfortunately, due to the particularity of the independent variable under investigation, the nascent nature of the study in this part of the world, findings similar or dissimilar to the present study could not be found by the researcher. Nevertheless, the work of Azuka (2012) was presented in literature review due largely to some resemblance of the variables with that of the present one.

This study was considered because of the use of public schools in Abuja and the comparison of urban school students and rural school students all in Abuja as well. An implied interpretation would be that irrespective of the secondary school types used by the research, the EI of the students would be the same, meaning that there is no significant difference in EI otherwise there will be no basis for comparison in terms of their academic achievement.

Students' major discipline and their emotional intelligence (EI)
Hypothesis three of this research was concerned with students' major discipline and EI. The result of the test of the hypothesis revealed that students major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) does significantly influence the emotional intelligence of freshmen in universities in South-South Nigeria. However, a closer observation shows that, that of relationship management was not significantly influenced by student's major discipline. In addition, the Scheffe test for the post-hoc comparison for significant differences showed that the pairs of Arts/Humanities and Engineering, Arts/Humanities and Education, Engineering and Medical Science, Engineering and Science, Education and Medical Science and Education and Science in terms of self awareness dimension are all statistically significant. The pairs of Arts/Humanities and Education, Engineering and Education and that of Education and Medical Science in terms of social awareness dimension are all statistically significant. In the case of self control, only the pair of Education and Science was found to be statistically significant. The pairs of Arts/Humanities and Engineering, Arts/Humanities and Education, Arts/Humanities and Science, Engineering and Medical Science, Engineering and Science, Education and Medical Science and Medical Science and Science in terms of self management were found to be statistically significant. In the case of total EI the pairs of Arts/Humanities and Science, Engineering and Science, Education and Science and Medical

Science and Science were found to be statistically significant out of the ten pairs of students major discipline.

This result is however surprising for self awareness, social awareness, self-control, and self management but expected for relationship management dimension. Freshmen, otherwise year one students of universities in various disciplines, are practically new to the university environment which has its adjustment challenges and so one would expect that their emotional intelligence may not differ significantly from discipline to discipline, owing to the fact that the students have not been culturised by the demands of their various disciplines. But this was not the case in this study with the exception of relationship management dimension of emotional intelligence. It may be observed that the significant differences in emotional intelligence with regards to self awareness, social awareness, self-control, and self management may also be as a result of the secondary schools they attended, which may have prepared them individually and collectively to become functional members of their society at that level of education. However, one can assume that falling behind with regard to relationship management, is a pointer to wrong application of the correct standard in choosing a career and school. Since, students of those disciplines would form association with people as part of job requirement. Especially, when we judge that emotional intelligence skills are paramount for students in arts/humanities, education and medical sciences achieving their professional goals (Tucker, Sojka, Barone, & McCarthy, 2000) one would expect that their relationship or social skills would have been different even significantly. Furthermore, accomplishment in assured discipline is reliant on ones intensity of emotional intelligence so, one may suppose that students positioned in disciplines well-suited according to their emotional intelligence can become the reasons for such different findings.

Nevertheless, works in disagreement with the present finding include that of Samer, Ahmad, Aieman, and Abdullah (2007), who found out that vocational students have an acceptable moderate level of emotional intelligence on the five dimensions. Nonetheless, there was no significant difference between the dimensions of emotional intelligence and the demographic variables (gender and area of specialization).

Another study is that of Nazan, Gungor, Abdullah, Bilal, Ergul, Hanife, Rukiye and Secil (2013).The fallout of their investigation was there is no significant relationship between the faculty of students and their emotional intelligence, order than sociability dimension of EI. In addition, the study revealed also a significant association between EI and academic achievements, as well as 11% of variance in academic achievements was enlightened by students' emotional intelligence.

Interaction effect of gender, school types and students major discipline on emotional intelligence (EI)
In the fourth hypothesis the interaction effect of gender, school types and students major discipline of the freshmen on their emotional intelligence were sought and the result indicated significant interaction effect. This means that the interaction effect of gender, school types (Private, State or Federal) and students major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of freshmen in South-South Nigeria universities was significant. In addition, there were significant interaction effect between gender and school type, between gender and students major discipline and even between school type and students major discipline as far as their EI is concern.

Nevertheless, the researcher could not find any findings that are in agreement or disagreement with the result of the present one. Consequently, the outcome of this finding serves as the basis

for subsequent research in this area of study as it concerns the variables investigated in this study.

CONCLUSION AND RECOMMENDATIONS

In conclusion gender of the students does influence their emotional intelligence with regard to self awareness, self-control, and self management dimensions in favour of the male students. However, with respect to social awareness and relationship management dimensions of EI, gender does not play any significant role. School type (Private, State or Federal) does significantly influence social awareness, self-control, self management and relationship management dimensions of emotional intelligence of freshmen in universities in South-South Nigeria with the exception of self awareness dimension as well as overall EI.

The study has also shown that the students major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) does significantly influence the emotional intelligence of freshmen in universities in South-South Nigeria. In addition, the post-hoc comparison for significant differences showed that some pairs are significant in each of the dimensions with the exception of the pairs in relationship management which shows no significant difference in any of the pairs.

The interaction effect of gender, school types (Private, State or Federal) and students major discipline (Arts/Humanities, Engineering, Education, Medical Science or Science) on the emotional intelligence of freshmen in South-South Nigeria universities was also significant. In addition, there were significant interaction effect between gender and school type, between gender and students major discipline and even between school type and students major discipline as far as their EI is concern.

In the view of the researcher, students' EI are definitely influenced by their personal characteristics and dispositions and so require attention. Moreover, several factors such as earnings situate of up-bringing, kin conditions and social-cultural atmosphere also affect EI. By and large, it may appear as thou this study conducted came up with different outcome and so generalization is made difficult. Considering the quantity of factors influence on emotional intelligence and the type of influence, becomes apparent conducting numerous studies in this endeavour at dissimilar locations.

In line with the answers of this study, the following recommendations are presented: This study has shown significant difference in the EI of both male and female students except in social awareness and relationship management dimensions. Furthermore, the secondary schools freshmen attended do not significantly influence their EI on the whole. Based on this, school counselors of various universities should properly counsel students with social adjustment problems that could be linked to the dimensions of EI identified in this investigation.

Emotional Intelligence EI competencies/skills which are teachable be taught in the university in view of its inherent benefits to the students, teachers, school authorities and indeed the larger society.

Regular assessment of the students' emotional intelligent quotient should be done by the university authorities. This will help to organize training, remedial programs and guidance counselling services for those identified with low emotional intelligent quotients since training helps to increase the level of emotional intelligence.

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