

Impact of Human Resource Management Systems, Organizational Citizenship Behavior on Organizational Performance: Quantitative Study in University Settings

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Abstract

This study is aimed at investigating the impact of Human Resource Inputs (Motivation) & Human Resource Practices (T&D) on Human Resource Outputs (Employee Performance) of the faculty members working in different colleges and universities in Pakistan. 150 structured survey questionnaires were sent through for data collection from the faculty members of Universities/Institutes of Pakistan and after multiple responses 120 questionnaires were received. The results of the study showed that human resource management systems have statistically significant relationship with employee performance and organizational citizenship behavior. The study helps the management of the Universities/Institutes of Pakistan in improving employee performance both in colleges and universities based in Pakistan.

Keywords: Motivation, Training & Development, Employee Performance and Organizational Citizenship Behavior.

INTRODUCTION

Higher Education Institutions (HEIs) played their overriding role in developing wisdom and virtue in the youth. It's HEIs role to develop youth with respect to spirituality, mentally, physically and promote country's cultural, political, social and economic conditions. Around the globe, universities ties with industrial organizations with respect to provide updated knowledge to the pupils through their teaching staff that resulted in meaningful and rapid growth of economy. Relevance with society needs, research facilities, financial crisis, arts students more than science students, weaknesses of examination system, ineffective governance, extra role performance and academic results are not at par with international standards.

Globalization, changing demographics, skills gaps, and worker shortages can have a profound effect on a nation's ability to maintain its competitiveness (Fernandez, 2001; Laprade, 2006). Without a well trained and well prepared labor force, businesses lose the ability to compete both nationally and internationally, resulting in decreased economic success (Tomaka, 2001). Rapidly advancing technology has contributed also to this constant pressure for speed, innovation, and change (Brown and Campbell, 2001). Employees must possess, therefore, a wide variety of technical and interpersonal workplace skills and competencies that allow them to work with advanced technologies and function optimally in today's high performing organizations (Combs et al., 2006; Fernandez, 2001).

Huselid (1995) demonstrated clearly that "Human resource management practices known as high-performance workplace practices (HPWP) (e.g. training, incentive compensation, selectivity – all of which are performance enhancing techniques) are linked to greater productivity and financial performance". Similarly, in a meta-analysis, which was

examining 92 studies that included 19,319 organizations, (Combs et al). (2006) found a positive correlation between HPWP and both operational (e.g. retention and productivity) and financial (e.g. accounting or marketing returns) performance. In the manufacturing sector, Lam and White (1998) present strong evidence that a combination of extensive training, development programs, above-average compensation, benefits and effective recruitment practices positively influence corporate performance so that the education sector needs to review all these practices and policies in order to maintain and achieve high level of success and credibility.

Now a days the importance of this sector is valued enough to take it in serious consideration immediately. Despite the existence of a body of research linking organizations' human resource management practices and economic viability in for-profit settings, few studies have examined the link between human resource management practices and performance across firms (Fulmer et al., 2003). In addition, a large number of researchers have attempted to measure and some even proved the impact of the entire human resource management (HRM) system on both work and organizational performance (Huselid, 1995). To address this gap in the literature, this study aimed to investigate the impact of different human resource management systems on their performance and extra role behavior take a systems approach to examine how employee performance and OCB.

The goal of commitment HR systems is to develop —committed employees who can be trusted to use their discretion to carry out tasks in ways that are consistent with the organizational goals|| (Arthur, 1994, p. 672). Employee discretion is at the heart of commitment HR systems and serves two purposes. First, it increases an employee's motivation to perform. The second reason is that it enables the firm to better deal with uncertainty in the environment, be more flexible and respond quickly to environmental changes (Tsui, et al., 1995). However, discretion alone is not enough. Employees need to acquire firm specific skills that are not marketable to other firms in order to understand the inner workings of the firm (Lepak & Snell, 1999). In addition, firms need to ensure that the decisions employees make are in line with organizational interests. To ensure that employees acquire firm specific skills that are not marketable to other firms and act in the best interest of the firm, employers need to offer inducements to its employees.

The purpose of this study is to verify the model which discovers the relationship of Human Resource Inputs (Employee Motivation), Processes/Practices (Trainings & Developments) and OCB with organizational Outputs (Employee Performance) especially in the context of faculty of Universities/Institutes in Pakistan. Employee's Motivation is essential and plays a vital role in the progress and development of the job, organizations and Extra Role Performance (OCB) of the organizations, especially in the context of service organizations. If the employee performance and Individual Task Performance (OCB) of such organizations are not good, their profitability and service quality along with their image in the competitive market would be at risk and their existence would be difficult. Therefore, especially the service organizations management should have knowledge and it should be aware of the impact of Human Resource Inputs and Processes/Practices over Organizational Outputs. Employees of the Universities/Institutes especially the faculty members are responsible for the knowledge attainment and enhancement of the students which enable to perform in the market, and hence considered as very primary and important part of economy. This study is conducted to find out the relationship of Human Resource Inputs and Processes/Practices with Organizational Outputs. It is important to conduct this kind of research in private and public sector Universities/Institutes.

LITERATURE REVIEW

Barney (1991) argued that organization used human resource management systems for attain the competitive advantage. Numerous researchers (e.g., Collins and Smith, 2006; MacDuffie, 1995; Ichniowski, Shaw and Prensushu, 1997; Batt, 1999, 2002; Huselid, 1995;

Delery and Doty, 1996) found the strong positive relationship between high-commitment, involvement, firm performance and higher performance work systems / human resource management systems. Theoretical framework on human resource management systems were developed in US and scholars tried to explore the possible dimensions for applicability of same models in other countries. Empirical researches from European nations (Gooderham, Parry and Ringdal, 2008; Horgan and Muhlau 2005; Martin-Tapia, Aragon-Correa and Guthrie, 2009; Guthrie, Flood, Liu and MacCurtain, 2009), South Korea (Bae and Lawler, 2000), Japan (Takeuchi, Lepak, Wang and Takeuchi, 2007) and New Zealand (Fabling and Grimes, 2010; Guthrie, 2001) are strong evidence that support the notation of implementation of US based HR practices in different countries having different management contexts. On other side of coin, some researchers also questioned the applicability of US based HRM systems in cross-cultural due to the country's culture in which organizations are operating their HR practices (Gooderham, Nordhaug and Ringdal, 1999).

The field of SHRM has placed a tremendous emphasis on investigating the relationship between commitment HR systems and firm performance. The performance outcomes used in examining this relationship fall within four categories—stock-market, financial/accounting, organizational, and human resource (Dyer & Reeves, 1995). Shareholder return is an example of stock-market outcomes. Financial/accounting outcomes refer to sales revenue and net profits. The next two types of outcomes—organizational and human resource—are distinguished from stock-market and financial/accounting outcomes in that they represent more proximal as opposed to distal outcomes (Paauwe & Boselie, 2005). Proximal outcomes are those that contribute to more distal outcomes such as increased sales revenue and higher net income (Paauwe & Boselie, 2005). An emphasis on proximal outcomes serves, in part, to address the call by Becker and Gerhart (1996) for an understanding of —the black box between the firm's HR system and the firm's bottom line|| (p. 793). Organizational outcomes place an emphasis on customer satisfaction, quality, productivity, and other operational performance indicators (Dyer & Reeves, 1995; Wright & Kehoe, 2008). Affective and behavioral responses such as job satisfaction and employee turnover comprise human resource outcomes (Dyer & Reeves, 1995; Wright & Kehoe, 2008).

Recently, the studies of Sun, Aryee and Law (2007), Zheng, Morrison and O'Neill (2006) and Zhang and Li (2009) in Asian countries (China) demonstrated the positive association of HRM system (high performance HR practices) with the firm performance. Although, the study of (Björkman and Fan 2002) argued that western HR systems cannot be effective in Asian countries. Xiao and Björkman (2006) contended that "some practices, such as employment security, which is often considered as an element of HPWS, are considered as a symbol of inefficient 'iron-bowl systems' and are not associated with the enhancement of extra-role behaviors of the employees (Gong and Chang, 2008). There are also some studies that have failed to find positive relationships between HPWS and firm performance in China (Liu, Zhou and Cao, 2005; Jiang and Zhao, 2004). Jackson and Schuler (1995) suggested that the effectiveness of a human resource management system needs to be understood in a certain management context.

Wood and Albanese (1995) defined high performance work systems as "a HRM approach that relies on human resource practices that help employees to identify with the firm's goals so that people's behavior is self-regulated to work hard to accomplish those goals, rather than being controlled by sanctions and pressures". Many related terms have emerged to refer to this HRM approach, such as high commitment work system (HCWS) or high involvement work system (HIWS), which have been regarded as synonymous by most studies. Arthur (1994) claimed that traditional HRM systems were responsible for improve efficiency, specified rules and procedures, reduce direct labor costs and measuring rewards on some laid

criteria whereas HPWS seeks to influence employee motivation, abilities, commitment, knowledge, skills, and opportunities (Batt 2002; Appelbaum 2000; MacDuffie 1995).

As Lawler (1995) pointed out, "all too often, the personnel function adds value primarily through the performance of administrative activities." Mohrman and Lawler (1999:445) posed a particularly relevant point by highlighting the view that "the role of business partner is emerging in large part because the issues of organizational performance and HRM are inextricably intertwined... Although processes are being automated, in most companies there has not yet been a major reinvention of the way in which the HR department functions." Gratton et al. (1999) provided a wealth of in-depth information that aims to uncover the reality of HRM in a number of high profile organizations. Of most relevance to this discussion is their notion to discover "the link between intended business strategy, intended HR strategy, and realized HR interventions" (Gratton et al., 1999:7). The literature found very little evidence of sophisticated HRM practice, even though many HR directors express an understanding of the need to "match the management of people with the overall strategic direction of the organization" (Gratton et al., 1999:202). One of the most compelling issues in the SHRM literature is that no single definition or conceptual framework of SHRM emerges as a viable standard system in the field.

Human resource inputs include variables which develops HRM process to produce and distribute products and services that are highly appreciated by the customers e.g. skills and motivation (Delaney and Huselid, 1996; Lado and Wilson, 1994). Delaney and Huselid (1996) noted the effectiveness of skilled employees will be limited if they are not motivated to perform their jobs. It is clear that both extrinsic and intrinsic motivation (e.g. Reio and Callahan, 2004) predict important organizational outcomes like job performance; yet, we focus on employee's extrinsic motivation and its management as part of the HRM system in this research. Chen and Hsieh (2004) describe four types of extrinsic financial motivators for employees that can influence the success and competitive advantage of a company:

- (1) Specific skill payment;
- (2) Performance pay;
- (3) Pay based on seniority; and
- (4) Job-based pay.

Human resource inputs and processes produce vital organizational outcomes. In this study, we focus on two of the more salient variables in the business literature, i.e. employee performance and firm performance. For employees and researchers, a common area of interest and discussion is Employee performance and may very well be the most important construct in human resource studies (Reio and Wiswell, 2000). Consistent with a systems perspective of human resources (Lado and Wilson, 1994), employee performance may be considered an outcome of human resource inputs and organizational processes. Thus, employee performance may be a key indicator of the effectiveness of the HR system and may also influence firm performance. Despite the demonstrated importance, however, relatively few researchers have examined the impact of HRM practices on job performance.

Organizational citizenship or extra-role behaviors mainly put positive influence on the members of organizations (Poncheri, 2006). "Organization's defense against influence and criticism of the internal and external forces to devote in the organization can be defined as Organization Citizenship Behavior (OCB)" (Turnipseed & Rassuli, 2005), or "behavior in a particular situation more than the expected level of expectations of the organization" (Joireman et al. 2006). Dick et al. (2006) claimed that organizational concerns appeared as the motives which are very closely associated with the extra-role of OCB towards their organizations. OCB also offered greater performance and output in long terms as compared to short term goals of organizations (Joireman et al. 2006). Koys (2001) claimed that OCB's importance could be realize by its positive and stronger impact on organizational profitability. Jacqueline et al. (2004) argued that "individuals engage in OCB as a form of reciprocity based on organizational treatment". Employees who perform at their best through functional

participations in the organizations which is Altruism (as sub component of OCB) as found by Turnipseed & Rassuli (2005). Coole (2003) claimed that OCB not only predicts the overall performance but also task performance equally.

In his study Baker (2005) concluded that “OCB and CWB (Counterproductive Work Behavior) were significantly negatively correlated, which meant that a person high on OCB scale would not show any such behavior posing an adverse effect to production”. The employees engaged more and more in extra-role behavior in organizations, the organizations become more successful (Neihoff & Yen, 2004). In Asian context, the culture is different from other western countries then might be the term OCB could be changed. Organization Citizenship Behavior may differ across the environmental segmentations within organization Gautam et al. (2006). Morrman et al. (1998) claimed that the employees who want to perform extra-role behaviors may require the potential supports from their organizations. After all above urging there also exist an observation about OCB i.e. OCB is an extra-role behavior that is not properly evaluated (Pond et al. 1997).

In any organization, the basic requirement of an influential management is motivating its employees. “Motivational aspects are those psychological processes that cause the encouragement, direction and determination of behavior” (Ilgen and Klein, 1988). Employees with high motivation level act as an asset for the organization. Degree by which a person struggles to work hard and accurate is termed as work motivation—to the encouragement, direction, and determination of effort in work settings” (Rainey 2001). Setting of the work place and environment with certain motivation levels determine the priority of employees for a working place over another place. This phenomenon also explains why some employees put more effort in their jobs and why others take it in a casual manner. (Robertson, Smith and Cooper 1992) say that employees’ ability, temperament and motivation determine their effort and performance at work place. Such things are influenced by questions “why do people go to work or why do people work hard”.

Core self-evaluation is an individual’s self-evaluation of his personal characteristics. Four core individual traits which influence various work outcomes comprise confidence, comprehensive self-efficacy, strength of mind, and emotional solidity (Judge et al., 1997; Judge, Erez, & Bono, 2002). Different research based assumptions quote job satisfaction, motivation, and performance are directly related with core self-evaluations (e.g., Bowling, Wang, Tang, & Kennedy, 2010; DeCarlo & Agarwal, 1999; Erez & Judge, 2001; Grant & Wrzesniewski, 2010; Judge & Bono, 2001; Judge, Locke, Durham, & Kluger, 1998).

Motivation has been treated as a unitary attention that varies mainly in amount in many studies (e.g., Bandura, 1996; Baumeister & Vohs, 2007). Higher motivation, conversely catalyzed, will yield higher achievement and more successful implementation. Self-determination theory (SDT; Deci & Ryan, 2000; Ryan & Deci, 2000),

H1a: Motivation is positively related to Employee Performance.

H1b: Motivation has positive impact on Employee Performance.

A number of studies certainly using dissimilar conceptualizations and measures associated to pro social motivation, suggested that pro social motivation is related with higher levels of attentiveness, performance and output diagonally diverse responsibilities, jobs, and extra behaviors (e.g., Bing & Burroughs, 2001; Brewer & Selden, 1998; Grant et al., 2007; Korsgaard, Meglino, & Lester, 1997; Naff & Crum, 1999; Rioux & Penner, 2001; see also Ilies, Scott, & Judge, 2006). Conversely, several studies have returned fewer encouraging results, suggesting that distinctive forms of pro social motivation are not comprehensively related to job performance evaluations (Alonso & Lewis, 2001) or the appearance of organizational citizenship behaviors (Konovsky & Organ, 1996). Explanation for these conflicting results is that researchers have unnoticed a significant aspect along with pro social motivation varies.

How do fundamental and pro social motivations interrelate to manipulate determination, performance, and output? Determination refers to the sum of time that employees waste in their hard work (e.g., Dweck & Gilliard, 1975; Sandelands, Brockner, & Glynn, 1988). Performance refers to the level to which employee's behaviors conquer organizational objectives (e.g., Beal, Cohen, Burke, & McLendon, 2003; Campbell, 1990; McCloy, Campbell, & Cudeck, 1994; Motowidlo, 2003). Productivity shows an ending of performance—the amount of productivity that consequences from performance behaviors as well as exterior background and opportunity factors (e.g., Blumberg & Pringle, 1982; Schmidt & Hunter, 1983).

Ryan and Deci (2000) showed that extrinsic goals are certainly not weaker than intrinsic motivations for appealing in an action. For example, a student who studies to get entrance to college or university is motivated by extrinsic forces but also can be glad about the value of studying. Likewise, self determination theory explains whether extrinsic goals are totally volitional and donate to one's sense of happiness (Sheldon & Elliot, 1998). This theory argues that persons are naturally proactive, looking for experiences that please intrinsic needs such as capability or relations with others (Deci & Ryan, 2000). Practical analysis too views the person as intrinsically ambitious to act and recognizes that diverse people connect in the same behavior for very diverse reasons (Clary et al., 1998).

H1c: OCB mediates the relationship of Motivation and Employee Performance.

An essential requirement of every organization, either large or small, is hiring competent workforce on all hierarchical levels. The designed curriculum and syllabus in any educational institute does not cater training the students for professional competencies or for a specific place in a company. Only a limited number of personnel are well equipped with working skills, knowledge, abilities and competencies. (SKAC), as a result the remaining workforce lies in a need of being provided with guidance and proper coaching for contributing in company's successive growth and establishment. (Barron and Hagerty 2001). Every organization has the requirement of conducting training and development programs since it is regarded as employees' issue in many organizations. At the same time the types and methodologies of training vary in different companies. Cole (2002:329) explains that there are different factors which affect the quantitative and qualitative methodologies of T&D program. These include the extent of internal and external changes in work environment, the degree to which management considers it important to conduct training sessions as a potential source of motivating employees, utilization and availability of resources and proper skills among the employees.

H2a. Training & Development is directly related to Employee Performance.

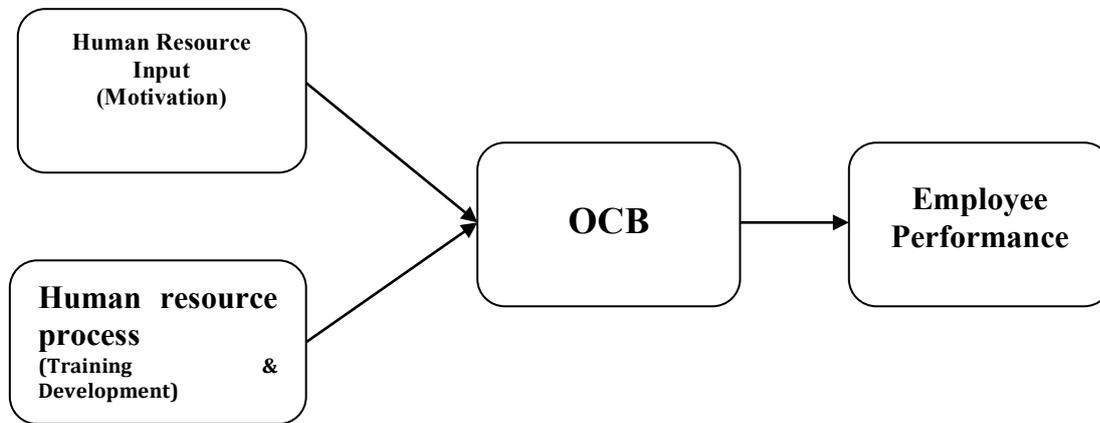
H2b. Training and Development has positive impact Employee Performance.

H2c: OCB mediates the relationship of Training & Development and Employee Performance.

RESEARCH METHOD

To authenticate the relationship formulated in the hypothesis prior, this particular chapter is focused to discuss the methodology used. Ten subsections have been made in this chapter which covers up all the rational aspects of research methodology which is being used in this study. In the first subsection theoretical frame is discussed, in second subsection pilot study is discussed, third subsection explains the sight and respondents, fourth subsection contains discussions regarding population and sampling techniques used to draw the sample from population. In fifth subsection reliability analysis are discussed. The sixth subdivision discusses the procedures and means which are used for collection of data, seventh subsection includes the measures and techniques for the data coding and analysis furthermore the reliability analysis or the Cronbach's Alpha of variables under this study is argued in the same subsection. Last subsections include time frame, sample size and sampling technique and software's used in the study.

The theoretical framework mentioned below in *Figure1* symbolizes the associations among the dependent and independent variables. In this case, the model is clearly defined by the research question and hypothesis. The intention of the study is to find out correlations and regressions among variables given. This study will analyze the relationship of Motivation, Training & Development & Employee Performance. Further the study analyzes the mediation effect of OCB between Motivation and Employee Performance and Training & Development and Employee Performance of the faculty members.



The respondents for this study are the faculty members (lecturers, Assistant Professors, Associate Professor and Professors) of public and private sector Universities/Institutes for the measurement of Human Resource Inputs (Motivation), Processes/Practices (Training & Development), Extra Role Performance (OCB) and Organizational Outputs (Employee Performance). A total sample of 120 survey forms was collected from the faculty members. Then it was left with 115 Questionnaires, real response rate was 54.76% and this was utilized for advance analysis.

The analysis was done at the collected responses, data was coded and also the data continuation was made by excluding responses with missing information. Then the reliability was measured. Cronbach's α (alpha) is a coefficient of reliability. It is generally employed as a measure of the reliability or internal consistency of a psychometric test score for a sample of given examinees. Most of the studies have exposed that the value of Cronbach alpha above .7 indicates strong reliability among the items which are incorporated in the questionnaire. And according to the (Cuieford, 1965) cronbach alpha ahead of ($\alpha = .7$) are satisfactory.

Table-1: Reliability analysis of independent and dependent variables

Reliability analysis of independent and dependent variables	
Independent & Dependent Variable	Cronbach's Alpha
Motivation	0.68
Training & Development	0.96
Employee Performance	0.74
Organizational Citizenship Behavior	0.84

Reliability of Motivation is ($\alpha = .68$), reliability of Training & Development is ($\alpha = .96$), reliability of Employee Performance is ($\alpha = .74$) and reliability of Organizational Citizenship Behavior is ($\alpha = .84$) which are more than .700 except one and that is Motivation which is almost equal to ($\alpha = .7$). Therefore further analysis is logically allowed as the data is reliable. The above results showed that for the 6 items which were integrated in the questionnaire for the measurement of Motivation of the faculty members and it had a Cronbach's Alpha value .68 which means that there is reliability among the items included to measure Motivation. To measure Training and Development total 10 items were added and their Cronbach's Alpha

value is .96, which also shows the strong reliability among the items. To measure Employee Performance total 10 items were used and the value of the Cronbach's Alpha for these 10 items is .74 again showed the strong reliability among the items and to measure Organizational Citizenship Behavior total 9 items were used and the value of the Cronbach's Alpha for the 9 items is .74 which means that strong reliability exists amongst the items of this particular variable.

DATA ANALYSIS

Gender, experience, qualification, income etc. have been used as demographic variables in different studies e.g. Naem, M. (2011). This study also focuses on the age, gender, qualification and experience in current university. The reason to use these variables for this study is given under the head of each variable along with their coding used for analysis.

Table 2: Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	83	72.2	72.2	72.2
Female	32	27.8	27.8	100.0
Total	115	100.0	100.0	

In demographic profile, the first question is asked about the participant's gender. This variable was measured against the two close-ended alternatives or classes. "1" was used for the coding of Male and "2" was used for the female. Results showed that out of 115 respondents 83 were male faculty members that were 72.2%, and out of 115 respondents 32 were female faculty members and that were 27.8%. No missing data were found during the analysis.

Table- 3: Age.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 21-30 years	26	22.6	22.6	22.6
31-40 years	45	39.1	39.1	61.7
41-50 years	20	17.4	17.4	79.1
51-60 years	14	12.2	12.2	91.3
Above 60 years	10	8.7	8.7	100.0
Total	115	100.0	100.0	

The second question was regarding the faculty members' age. Five categories were made to measure the age in which 1 = 21-30 years, 2 = 31-40 years, 3 = 41-50 years, 4=51-60 years and 5=above 6 years. The results revealed that 22.6% faculty members belongs to category 1 whereas 39.1% belongs to category 2, 17.4% belongs to category 3 and 12.2% and 8.7% participants were belongs to category 4 and 5 respectively.

Information regarding the qualification of faculty members was taken on three categories: less than 16 years, 16-18 years and more than 18 years of education. As mentioned in the table only 1.7% faculty members have less than 16 years of education, 20.9% faculty members have 16-17 years of education and 77.4% faculty members have 18 or more than 18 years of education.

Table-4: Qualifications.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 16 years	2	1.7	1.7	1.7
16-17 years	24	20.9	20.9	22.6
18 years or more	89	77.4	77.4	100.0
Total	115	100.0	100.0	

Table- 5: Institute Prior Experiences.

	Frequency	Percent	%	Cumulative Percent
Valid Less than 2 years	23	20.0	20.0	20.0
More than 2 but less than 5 years	49	42.6	42.6	62.6
More than 5 years	43	37.4	37.4	100.0
Total	115	100.0	100.0	

Last demographic variable is about the experience of the public and private sector faculty members. This variable was divided into 3 different categories in order to find out the experience of the respondents with the current university and those categories are: Less than 2 year, 2-5 years and more than 5 years. The results shows that out of 115, 23 faculty members have less than 2 years of experience in current university, 49 faculty members out of 115 have 2 – 5 years of experience and 43 faculty members have more than 5 years of experience.

Descriptive statistics were shown in following table. The mean and standard deviation of *Motivation* is 3.77 and 0.64, *T&D* is 2.79 and 1.13, *EP* is 3.98 and 0.53 whereas mean and standard deviation of last variable *OCB* is 3.93 and 0.64.

Table-6: (Descriptive Statistics) Means and Standard Deviation

	N	Minimum	Maximum	Mean	Std. Deviation
Mot	115	1.00	4.83	3.7783	.64426
T_D	115	1.00	5.00	2.7939	1.13943
EP	115	1.44	5.00	3.9816	.53000
OCB	115	1.00	4.89	3.9395	.64313

To identify the level and strength of association Pearson correlation analysis method is used and values are analyzed. According to the Oxford Dictionary of Geography correlation is a link or association between two variables. There are two types of correlations, where positive correlation is established the amplification or reduction in one variable is matched with the

same change in other variable and in case of negative relationship between two variables, there is turn down in one variable and increase in other variable.

Table-8: (Descriptive Statistics) Correlations

	EP	OCB	Mot	T_D
EP	1			
OCB	.521**	1		
Mot	.410**	.464**	1	
T_D	.483**	.361**	.541**	1
* Significance level of Correlation is 0.05 level (2-tailed)				
** Significance level of Correlation is 0.01 level (2-tailed)				

In order to model the relationship among three or more than three variables the mathematical method in statistics is called as the regression analysis. It is utilized to find out the value of one variable specified the values of other variables. Basically regression analysis is used to find out the degree of relationship amongst the dependent and independent variables. In order to find out effect of independent variable on the dependent variable regression analysis were used. In first step, independent variables (motivation, T&D) were regressed on dependent variable (EP). The regression result showed that motivation explained 26% variance in EP and has positive and significant impact (b = 0.210) on EP at significant level of 0.05. On the other hand, the second independent variable (T&D) regressed on EP of the faculty members. T&D explained 26% variance in the EP and have significant and positive impact (b = 0.37) on the dependent variable at the significant level 0.001. Based on the findings, the study hypotheses were accepted.

Table-8: Regression Analysis

		EP			
		β	R ²	ΔR^2	Sig.
STEP	1 (Independent Variable)				
	Motivation	.210	.264	.264	.031
	T&D	.369	.264	.264	.000

The following table showed the regression result between mediator (OCB) and dependent variable (EP). The result indicates that OCB explained 27% variability in EP and also has strong positive (b = 0.52) and significant impact on EP at the significant level of 0.001. Based on the findings, the study hypothesis was accepted.

Dependent Vs Mediator

Table-9: Regression Analysis

		EP			
		β	R ²	ΔR^2	Sig.
STEP	1 (Independent Variable)				
	OCB	.521	.271	.271	.000

As per third step of mediation mechanism, independent variables (motivation, T&D) were regressed on dependent variable (OCB). The findings indicate that motivation and training & development explained 23% variance for each in dependent variable (EP). The results also showed that motivation has positive and significant impact ($b = 0.38$) on OCB at the significant level of 0.001 whereas the impact of training & development on EP is insignificant.

Mediator VS Independent

Table-10: Regression Analysis

		OCB			
		β	R ²	ΔR^2	Sig.
STEP 1	(Independent Variable)				
	Motivation	.381	.233	.233	.000
	T&D	.155	.233	.233	.118

The following table showed the mediation mechanism in which motivation treated as independent, OCB as mediator and EP as the dependent variable. Model 1 indicates the direct relationship of independent variable and dependent variable. The regression result showed that motivation explained 26% variance in EP and has positive and significant impact ($b = 0.210$) on EP at significant level of 0.05. In the presence of mediator (model 2), the results showed that motivation and OCB explained 30% variability in EP. Independent variable ($b = 0.21$, significant level is 0.01) and mediator variable ($b = 0.42$, significant level is 0.001) have positive impact on EP. Since the significant level of independent variable is increased from steps 1 to 2 which means that there is mediation presents between motivation and EP.

Table-11: Regression Analysis

		EP					
		Model 1			Model 2		
Independent Variable		β	R ²	ΔR^2	β	R ²	ΔR^2
Motivation		.210	.264	.264	.214	.307	.036
		Sig= .031			Sig=.017	Sig=.017	Sig=.017
Mediator							
OCB					.421	.307	.036
					Sig=.000	Sig=.017	Sig=.017

The following table showed the mediation mechanism in which training & development treated as independent, OCB as mediator and EP as the dependent variable. Model 1 indicates the direct relationship of independent variable (training & development) and dependent variable (EP). The regression result showed that motivation explained 26% variance in EP and has positive and significant impact ($b = 0.37$) on EP at significant level of 0.001. In the presence of mediator (model 2), the results showed that training & development and OCB explained 37% variability in EP. Independent variable ($b = 0.34$, significant level is 0.001) and mediator variable ($b = 0.40$, significant level is 0.001) have positive and significant impact on EP. Since the beta values of independent variable is less in second step as compared to step 1 which means that mediation exists between training & development and EP.

Table 12: Regression

Independent Variable	Model 1			Model 2		
	β	R ²	ΔR^2	β	R ²	ΔR^2
T & D	.369 Sig=.000	.264	.264	.339 Sig=.000	.371 Sig=.000	.100 Sig=.000
Mediator						
OCB				.399 Sig=.000	.371 Sig=.000	.100 Sig=.000

DISCUSSIONS & CONCLUSION

The study explains to the research literature on variables associated again and again with a universities/Institute's competitive advantage. We were influenced in this regard by Barney (1991) and Carmeli and Tischler's (2004) came out for confirming intangible and therefore human organizational fundamentals when performing organizational research. Considering a system's perception (Rummler and Brache, 1995), to measure human resources as a full system which elaborates organizational outputs would be beneficial for the organizations. Lastly, borrowing mainly from Porter (1985), Barney (1991), Huselid (1995), and Combs et al. (2006), this particular study's conceptual models hypothesized that there were positive and statistically significant relationship among human resource inputs processes, and EP.

The aim of this particular study was to view the impact of Motivation, T&D and OCB on EP. Findings of this study showed resemblance with the number of accessible organizational research. For example, findings of this research support Carmeli and Tischler's (2004) results in which human resource factors in public sector positively and forcefully described five organizational performance outcomes. When considering employee Motivation, an important human resource input, we find indication supporting Askov (2000) and Clinton's (1999) statement Motivation has significant impact on variables interrelated sustainable competitive advantage, i.e. employee and firm performance. Supporting statements of Chen and Hsieh (2004) too, the results of this study prove and suggest that a system of extrinsic motivators can control the progress and success of an organization as measured by EP. Furthermore, of this study in relation to the human process variables (e.g. the existence of T&D programs) agree with Lawson and Hepp (2001), Holzer et al. (1993), Katz et al. (1985), and Den Hartog and Verburg's (2004) results that T&D significantly influence organizational outcomes (e.g. EP). In this study, the results described that that motivation and T&D have a positive and significant relation with EP and OCB also showed significant relation with EP.

Past studies showed that it is clear that both extrinsic and intrinsic motivation (e.g. Reio and Callahan, 2004) predict important organizational outcomes like job performance; yet, in this study we focus on he impact of employee's motivation on EP and results showed significant relation between them. The study also showed a positive relationship between T&D and EP and same was guided by the studies, For example, increases in Michigan manufacturing firm's employee on-the-job training hours were associated with lasting reduction in scrap rates (Holzer et al., 1993). Bartel (1994) reported the presence of formal training programs for managers, union and non-union employees, and professional and technical employees, has a positive association with increases in labor productivity. Katz et al. (1985) also demonstrated a positive relationship between employee participation in training programs and production quantity and quality.

This research is potentially able to work as a guiding principle for the Higher Educational Institutes to rank properly the importance of Motivation, OCB and T&D in

measuring EP and also to upgrade the level of EP which ultimately serves as an important factor of progress and getting competitive advantage in this sector. Another reason to conduct this research and to choose the educational sector of Pakistan is that before this no extensive study has been conducted in this sector that can show the importance of these variables in Higher Education Sector of Pakistan.

Findings of this study added directions for future research for the researchers as well as implications for theory and practicality. Firstly, it is important to mention here that this study works as a bridge to fill the gap in the literature which was paying attention to find out relationship of Motivation, T&D and OCB with other variables like job performance and firm performance. It was clearly demonstrated by past researches that both extrinsic and intrinsic motivation (e.g. Reio and Callahan, 2004) predict important organizational outcomes like job performance; McGahan and Porter (2002), (e.g. Bharadwaj et al., 1993; Carmeli and Tischler, 2004) also conduct research to find relationship of motivation with other organizational outcomes, Researchers have demonstrated too that employee participation programs and T&D put stronger and significant positive influence on firm performance. For example, increases in Michigan manufacturing firm's employee on-the-job training hours were associated with lasting reduction in scrap rates (Holzer et al., 1993). Bartel (1994) reported the presence of formal training programs. Katz et al. (1985) also demonstrated a positive relationship between employee participation in training programs and production quantity and quality.

Secondly, previous researches showed guide that Motivation T&D and OCB have not studied altogether with respect to EP with or with out the presence of Mediator (OCB) in the same study. This study is paying attention to minimize fill that gap by studying the impact of Motivation, T&D and OCB on the EP. Thirdly, it was found by extensive literature review that in universities/Institutes in Pakistan studies have never been conducted with respect to Motivation, T&D and OCB and even the literature regarding these variables have not been found. Also it was found during the study that these variables especially T&D and OCB have not given proper attention in the universities /institutes in Pakistan. This type of study has not been conducted in the Higher Education Sector of Pakistan previously, so need was felt to fill this gap. The results of the study described that Motivation, T&D and OCB have a positive relationship with Employee and it also showed that OCB mediates the relationship of Motivation and T&D with EP. Earlier studies also confirmed that Motivation and T&D have Influence on the EP in other sectors.

The results of the study showed that T&D and Motivation are significant determinants to affect the EP. Furthermore it is significant to observe here that T&D and Motivation are contributing up to 26% in EP of the Faculty Members of Universities/ Institutes of Pakistan. The higher management of the Universities/ Institutes can be used as indication that these variables are highly important in increasing the EP of the faculty members of their respective University/Institute and these variables should be ranked accordingly in the development of strategies to enhance the performance of Employees in their University/Institute. Further as the results showed that OCB acted as a mediator in this particular model so therefore, the higher management of the Universities/Institutes have to take necessary steps to develop this culture.

Because of some obvious restrictions and limitations like shortage of time and cost, cross sectional study was conducted preferably; otherwise the best technique to carry out such study could be the longitudinal study. Furthermore, the data collection is done from universities of only Lahore but it could be more suitable study if data was collected from all over Pakistan. Only two variables (T&D and Motivation) with respect to EP with mediating effect of OCB have been studied in this particular study. Some other variables like, Employee Skills, Selection and Recruiting Process and Promotion and Reward Process have not been studied with respect to EP in this study.

REFERENCES

- Aaker, D. A. (1989). *Managing assets and skills: the key to a sustainable competitive advantage*: University of California, Haas School of Business.
- Analoui, F., & Karami, A. (2003). *Strategic management in small and medium enterprises*: Cengage Learning.
- Appelbaum, E., Bailey, T., Berg, P., and Kalleberg, A.L. (2000). *Manufacturing Advantage: Why High-performance Work Systems Pay Off*, Ithaca, New York: Cornell University Press
- Askov, E. N. (2000). Workplace Literacy: Evaluation of Three Model Programs. *Adult Basic Education*, 10(2), 100-108.
- Babakus, E., Yavas, U., Karatepe, O.M. and Avci, T. (2003). The effect of management commitment to service quality on employees' affective and performance outcomes. *Journal of the Academy of Marketing Sciences*, 31(3): 272-286.
- Bae, J., and Lawler, J.J. (2000). Organizational and HRM Strategies in Korea: Impact on Firm Performance in an Emerging Economy. *Academy of Management Journal*, 43(3): 502-517.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Barney, J.B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1): 99-120.
- Bartel, A. P. (1994). Productivity gains from the implementation of employee training programs. *Industrial Relations: A Journal of Economy and Society*, 33(4), 411-425.
- Batt, R. (1999). Work Organization, Technology, and Performance in Customer Service and Sales. *Industrial and Labor Relations Review*, 52(4): 539-564.
- Batt, R. (2002). Managing Customer Services: Human Resource Practices, Quit Rates, and Sales Growth. *Academy of Management Journal*, 45(3): 587-598.
- Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal*, 45(3): 587-597.
- Batt, R. and Moynihan, L.M. (2006). Human resource management, service quality, and economic performance in call centres', *Centre for Advanced Human Resource Studies Working Paper*, last accessed 9th February 2007, URL <http://www.ilr.cornell.edu/depts/cahrs/downloads/PDFs/WorkingPapers/WP06-01.pdf>.
- Behavioral Sciences., 2nd ed.
- Bharadwaj, S. G., Varadarajan, P. R., & Fahy, J. (1993). Sustainable competitive advantage in service industries: a conceptual model and research propositions. *The Journal of Marketing*, 83-99.
- Birasnav, M., & Rangnekar, S. Business, Strategy & Management.
- Björkman, I., and Fan, X. (2002). Human Resource Management and the Performance of Western Firms in China. *International Journal of Human Resource Management*, 13(6): 853-864.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. *Personnel selection in organizations*, 71, 98.
- Brown, T. A., Campbell, L. A., Lehman, C. L., Grisham, J. R., & Mancill, R. B. (2001). Current and lifetime comorbidity of the DSM-IV anxiety and mood disorders in a large clinical sample. *Journal of Abnormal Psychology; Journal of Abnormal Psychology*, 110(4), 585.
- Callahan, J. L., & Reio Jr, T. G. (2006). Making subjective judgments in quantitative studies: The importance of using effect sizes and confidence intervals. *Human Resource Development Quarterly*, 17(2), 159-173.
- Carmeli, A., & Tishler, A. (2004). The relationships between intangible organizational elements and organizational performance. *Strategic Management Journal*, 25(13), 1257-1278.
- Carsrud, A. L. a. B. n., M.E. ((2007).). *Entrepreneurship*, . Greenwood Press, Westport.
- Carsrud, A. L., & Brännback, M. E. (2007). *Entrepreneurship*: Greenwood Pub Group.

- Chenet, P., Tynan, C. and Monet, A. (2000). The service performance gap: Testing the redeveloped causal model. *European Journal of Marketing*, 34 (3/4): 472
- Clinton, M. S. (1999). An examination of basic skills education and its effect on performance. *The Journal of Education for Business*, 74(5), 266-270.
- Cohen, J. (1983). The cost of dichotomization. *Applied Psychological Measurement*, 7(3), 249-253.
- Cohen, J. a. C., P. ((1983),). Applied Multiple Regression/Correlational Analysis for the
- Collins, C.J., and Smith, K.G. (2006). Knowledge Exchange and Combination: The Role of Human Resource Practices in the Performance of High Technology Firms. *Academy of Management Journal*, 49(3): 544–560.
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). HOW MUCH DO HIGH PERFORMANCE WORK PRACTICES MATTER? A META-ANALYSIS OF THEIR EFFECTS ON ORGANIZATIONAL PERFORMANCE. *Personnel Psychology*, 59(3), 501-528.
- CT. Pedhauer, E. J. ((1982),). Multiple Regression in Behavioral Science Research:. *Explanation and Prediction*, 2nd ed.
- Cumming, G., & Finch, S. (2001). A primer on the understanding, use, and calculation of confidence intervals that are based on central and noncentral distributions. *Educational and Psychological Measurement*, 61(4), 532-574.
- de Jonge, E., Schultz, M. J., Spanjaard, L., Bossuyt, P. M. M., Vroom, M. B., Dankert, J., et al. (2003). Effects of selective decontamination of digestive tract on mortality and acquisition of resistant bacteria in intensive care: a randomised controlled trial. *The Lancet*, 362(9389), 1011-1016.
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management journal*, 949-969.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management journal*, 802-835.
- Delery, J.E., and Doty, D.H. (1996). Modes of Theorizing in Strategic Human Resource Management: Tests of Universalistic, Contingency, and Configurational Performance Predictions. *Academy of Management Journal*, 39(4): 802–835.
- Dietz, J., Pugh, S.D. and Wiley, J.W. (2004). Service climate effects on customer attitudes: An examination of boundary conditions. *Academy of Management Journal*, 47(1): 81-92.
- Dillman, D. A. (2000). Mail and internet surveys: The total design method. *John Wiley, New York*.
- Dolin, J. (2000). *Værdier og undervisning i fysik. I*.
- Donavan, D.T., Brown, T.J. and Mowen, J.C. (2004). Internal benefits of service-worker customer orientation: Job satisfaction, commitment, and organizational citizenship behaviors. *Journal of Marketing*, 68: 128-146.
- Donavan, D.T., Brown, T.J. and Mowen, J.C. (2004). Internal benefits of service-worker customer orientation: Job satisfaction, commitment, and organizational citizenship behaviors. *Journal of Marketing*, 68: 128-146.
- Eaglen, A., Lashley, C. and Thomas, R. (2000a). Modelling the benefits of training to business performance in leisure retailing. *Strategic Change*, 9(5): 311-325.
- Eaglen, A., Lashley, C. and Thomas, R. (2000b). The benefits of training in leisure retailing: a case study of McDonald's restaurants. *Strategic Change*, 9(6): 333-345.
- Erlbaum, H., NJ. Combs, J., Liu, Y., Hall, A. and Ketchen, D. . ((2006),). "How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance". *Personnel Psychology*, 59, 501-528.
- Fabling, R., and Grimes, A. (2010). HR Practices and New Zealand Firm Performance: What Matters and Who Does It? *International Journal of Human Resource Management*, 21(4): 488–508.

- Ferguson, K. L., & Reio Jr, T. G. (2010). Human resource management systems and firm performance. *Journal of Management Development*, 29(5), 471-494.
- Fernandez, R. M. (2001). Skill-Biased Technological Change and Wage Inequality: Evidence from a Plant Retooling. *American Journal of Sociology*, 107(2), 273-320. Free Press, London.
- Fulmer, I. S., Gerhart, B., & Scott, K. S. (2003). Are the 100 best better? An empirical investigation of the relationship between being a "great place to work" and firm performance. *Personnel Psychology*, 56(4), 965-993.
- Gallie, D., Felstead, A. & Green, F. (2001). Employer policies and organizational commitment in Britain. *Journal of Management Studies*, 38: 1081–1101.
- Gelade, G.A. and Young, S. (2005). Test of a service profit chain model in the retail banking sector. *Journal of Occupational and Organizational Psychology*, 78: 1-22.
- Gong, Y.P., and Chang, S. (2008). Institutional Antecedents and Performance Consequence of Employment Security and Career Advancement Practices: Evidence from the People's Republic of China. *Human Resource Management*, 47(1): 33–48.
- Gooderham, P., Parry, E., and Ringdal, K. (2008). The Impact of Bundles of Strategic Human Resource Management Practices on the Performance of European Firms. *International Journal of Human Resource Management*, 19(11): 2041–2056.
- Gooderham, P.N., Nordhaug, O., and Ringdal, K. (1999). Institutional and Rational Determinants of Organizational Practices: Human Resource Management in European Firms. *Administrative Science Quarterly*, 44, 507–531.
- Guieford, J. P.(1965). *Fundamental Statistics in Psychology and Education*: New York: McGraw-Hill.
- Guthrie, J.P. (2001). High Involvement Work Practices, Turnover, and Productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1): 180–190.
- Guthrie, J.P., Flood, P.C., Liu, W.C., and MacCurtain, S. (2009). High Performance Work Systems in Ireland: Human Resource and Organizational Outcomes. *International Journal of Human Resource Management*, 20(1): 112–125.
- Hartog, D. N., & Verburg, R. M. (2004). High performance work systems, organisational culture and firm effectiveness. *Human Resource Management Journal*, 14(1), 55-78.
- Hensel, J.S. (1990). Service quality improvement and control: A customer based approach. *Journal of Business Research*, 20(1): 43-55.
- Holzer, H. J., Block, R. N., Cheatham, M., & Knott, J. H. (1993). Are training subsidies for firms effective? The Michigan experience. *Industrial and Labor Relations Review*, 625-636.
- Horgan, J., and Mu"hlau, P. (2006). Human Resource Systems and Employee Performance in Ireland and the Netherlands: A Test of the Complementarity Hypothesis. *International Journal of Human Resource Management*, 17(3): 414–439.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management journal*, 635-672.
- Huselid, M.A. (1995). The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *Academy of Management Journal*, 38(3): 635–672.
- Ichniowski, C., Shaw, K., and Prennushi, G. (1997). The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines. *American Economic Review*, 87(3): 291–313.
- Jackson, S.E., and Schuler, R.S. (1995). Understanding Human Resource Management in the Context of Organizations and Their Environment. *Annual Review of Psychology*, 46: 237–264.
- Jiang, C.Y., and Zhao, S.M. (2004). Firm Characteristics, Human Resource Management and Firm Performance. *Management Review (Chinese)*, 16(10): 22–31.
- Karami, A., Analoui, F., & Cusworth, J. (2004). Strategic human resource management and resource-based approach: the evidence from the British manufacturing industry. *Management Research News*, 27(6), 50-68.

- Katz, H. C., Kochan, T. A., & Weber, M. R. (1985). Assessing the effects of industrial relations systems and efforts to improve the quality of working life on organizational effectiveness. *Academy of Management Journal*, 509-526.
- Kirkman, B.L., Rosen, B., Tesluk, P.E. and Gibson, C.B. (2004). The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction. *Academy of Management Journal*, 47(2): 175-192.
- Labor, D. o. ((1991),). "What work requires of schools: a SCANS report for America 2000". *National Technical Service, Springfield, , VA*.
- Lado, A. A., & Wilson, M. C. (1994). Human resource systems and sustained competitive advantage: A competency-based perspective. *Academy of management review*, 699-727.
- Lam, L. W., & White, L. P. (1998). Human resource orientation and corporate performance. *Human Resource Development Quarterly*, 9(4), 351-364.
- Laprade, N. ((2006),). "The competitive edge: creating a human capital advantage for Kentucky". *Foresight*, 44,, 1-6.
- Lawson, T. E., & Hepp, R. L. (2001). Measuring the performance impact of human resource initiatives. *Human Resource Planning*, 24(2), 36-45.
- Liao, H. and Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47(1): 41-58.
- Liao, H. and Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47(1): 41-58.
- Liu, S.S., Zhou, Q.X., and Cao, G. (2005). In Search of the Best Human Resource Practices in China's Chain Stores. *Chinese Journal of Management Science*, 13(1): 141-148.
- MacDuffie, J.P. (1995). Human Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry. *Industrial and Labor Relations Review*, 48(2): 197-221.
- Martin-Tapia, I., Aragon-Correa, J.A., and Guthrie, J.P. (2009). High Performance Work Systems and Export Performance. *International Journal of Human Resource Management*, 20(3): 633-653.
- Masood, T. (2010). *Impact of Human Resource Management (HRM) Practices on Organizational Performance: A Mediating Role of Employee Performance*. Mohammad Ali Jinnah University, Karachi.
- McGahan, A. M., & Porter, M. E. (2002). What do we know about variance in accounting profitability? *Management Science*, 834-851.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79(4), 475.
- Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human performance*, 10(2), 71-83.
- Murphy, P. R. a. P., R.F. ((1993),). "In search of warehousing excellence: multivariate analysis of HRM practices". *Journal of Business Logistics*, Vol. 14,, 145-163.
- Murphy, P., & Poist, R. (1993). In search of warehousing excellence: a multivariate analysis of HRM practices. *Journal of Business Logistics*, 14, 145-163.
- NAEM, M. (2011). ENHANCING EMPLOYEE SATISFACTION IN OUTSOURCING FIRMS: AN EMERGENT CASE SCENARIO OF FUTURE EXPECTATIONS SAJAL KABIRAJ. *Asian Journal of Technology & Management Research Vol*, 1(01).
- Perry-Smith, J. E., & Blum, T. C. (2000). Work-family human resource bundles and perceived organizational performance. *Academy of Management journal*, 1107-1117.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Porter, M. E. ((1985),). *Competitive Advantage: Creating and Sustaining Superior Performance*,

Porter, M. E. (1985). Competitive advantages. *Creating and Sustaining Superior Performance*.

Reio Jr, T. G., & Sutton, F. C. (2006). Employer assessment of work-related competencies and workplace adaptation. *Human Resource Development Quarterly*, 17(3), 305-324.

Reio Jr, T. G., & Wiswell, A. (2000). Field investigation of the relationship among adult curiosity, workplace learning, and job performance. *Human Resource Development Quarterly*, 11(1), 5-30.

Reio, T. G., & Callahan, J. L. (2004). Affect, curiosity, and socialization-related learning: A path analysis of antecedents to job performance. *Journal of Business and Psychology*, 19(1), 3-22.

Rogelberg, S. G., & Luong, A. (1998). Nonresponse to mailed surveys: A review and guide. *Current Directions in Psychological Science*, 7(2), 60-65.

Rosenstiel, A. K., & Keefe, F. J. (1983). The use of coping strategies in chronic low back pain patients: relationship to patient characteristics and current adjustment. *Pain*, 17(1), 33-44.

Rummler, G., & Brache, A. 1995, *Improving Performance: How to Manage the White Space on the Organisation Chart*, 2 nd Edn, Jossey-Bass, San Francisco.

Schmit, M.J. and Allscheid, S.P. (1995). Employee attitudes and customer satisfaction: Making theoretical and empirical connections. *Personnel Psychology*, 48: 521-536.

Schneider, B., Salvaggio, A.N. and Subirats, M. (2002). Climate strength: A new direction for climate research. *Journal of Applied Psychology*, 87 (2): 220-229.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference.

Sheehan, K. B. (2001a). E-mail survey response rates: A review. *Journal of Computer-Mediated Communication*, 6(2), 0-0.

Sheehan, K. B. (2001b). Email survey response rates: A review. *Journal of Computer-Mediated Communication*, 6(2), 0-0.

Sheehan, K. B., & Hoy, M. G. (1999). Flaming, complaining, abstaining: How online users respond to privacy concerns. *Journal of advertising*, 37-51.

Simmons, D. E., Shadur, M. A. & Preston, A. P. (1995). Integrating TQM and HRM, *Employee Relations*, 17: 75-86.

Simsek, Z., & Veiga, J. F. (2001). A primer on Internet organizational surveys. *Organizational Research Methods*, 4(3), 218.

Stevens, J. (1996). Exploratory and confirmatory factor analysis. *Applied multivariate statistics for the social sciences*, 362-428.

Sun, L., Aryee, S., and Law, K.S. (2007). High-performance Human Resource Practices, Citizenship Behavior, and Organizational Performance: A Relational Perspective. *Academy of Management Journal*, 50(3): 558-577.

Susskind, A.M., Kacmar, K.M., and Borchgrevink, C.P. (2003). Customer service providers' attitudes relating to customer service and customer satisfaction in the customer-server exchange. *Journal of Applied Psychology*, 88(1): 179-187.

Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). Using multivariate statistics.

Takeuchi, R., Lepak, D.P., Wang, H., and Takeuchi, K. (2007). An Empirical Examination of the Mechanisms Mediating Between High-performance Work Systems and The Performance of Japanese Organizations. *Journal of Applied Psychology*, 92(4): 1069-1083.

Terpstra, D. E., & Rozell, E. J. (1993). The relationship of staffing practices to organizational level measures of performance. *Personnel Psychology*, 46(1), 27-48.

Tomaka, L. A. (2001). Workforce Development in the Midwestern Region. *Spectrum*, 27.

Wilkinson, A., Redman, T., Snape, E. & Marchington, M. (1998). *Managing with Total Quality Management. Theory and Practice* (Hong Kong: McMillan Business).

Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of management*, 18(2), 295-320.

Xiao, Z.X., and Bjo"rkman, I. (2006). High Commitment Work Systems in Chinese Organizations: A Preliminary Measure. *Management and Organization Review*, 2(3): 403-422.

Zheng, C., Morrison, M., and O'Neill, G. (2006). An Empirical Study of High Performance HRM Practices in Chinese SMEs. *International Journal of Human Resource Management*, 17(10): 1772-1803.