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Leadership Styles as Predictor of Decision Making Styles; Moderating Role of Emotional Intelligence

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Abstract

The present study aims to investigate the relationship between leadership styles and decision making styles with the moderating role of emotional intelligence. The sample of the study consists of 150 employees from different organizations including banks, pharmaceutical companies, and services industry located in Rawalpindi and Islamabad. For data collection Multifactor Leadership Questionnaire MLQ (Form-5) (developed by Bass and Avolio, 1990), general decision making style questionnaire (developed by Scott and Bruce, 1995), and emotional intelligence questionnaire (developed by GENOS EI inventory) were used. The study found that transformational leadership style have significant association with dependent, rational, intuitive, avoidant, and spontaneous decision making styles. Transactional leadership style positively associated dependent decision making style. Laissez-faire leadership style positively predicts avoidant decision making style. Emotional intelligence did not moderate the relationship between leadership styles and decision making styles.

Keywords: leadership styles, decision making styles, emotional intelligence, regression, correlation

1. Introduction

Leader is a person who has the abilities to influence others and the leadership is what leaders do to influence group to achieve some designated goals. The ability of effective leader is to make decisions confidently (Muchinsky, 2007). The core responsibility of a manager's is to make valuable decisions which helps organization's to achieve its goals. The success or failure of an organization depends upon managerial decisions (Kreitner and Kinicki, 2004). Recent dynamic corporate environment demands from managers to become excellent, quick, and effective decision makers. According to Singh (2001) decision making is the "total task of a manager". One of the characteristics of an effective leader is to make effective decisions. Leader performed various leadership styles depends upon their abilities, attitudes, knowledge and the environment in which he/she work as a leader. Such styles are divided into three main categories these are, transformational, transactional and laissez- faire leadership style.

Transactional leadership style (TR) deals with the normal flow of operations. To perform best such leader motivates their followers through power and incentives. Such leaders motivate employees by exchanging rewards for performance. Transactional leaders focus on short term or day to day operational decisions rather than for strategically long term decisions. They are mostly concerned that everything flows smoothly today. Such leaders are rational decision makers and problem solvers. They make logical decisions. Transactional leaders are also dependent decision makers as by depending on subordinate's cognitions to make decisions (Barbuto et al., 2000).

Transformational leadership style (TF) is viewed as humanistic, influential, motivational and inspirational. Transformational leadership style is a style through which a leader, who boosts the confidence level of individuals or groups, conjures up awareness and interest in the group and struggle to achieve their desire goals. They are just like a model for their supporters. Bass and Avolio (2000) define five facets of transformational leadership which as (a) idealized influence (attributed) – creating and building a sense of mission and vision in the mind of their supporters. Followers give him value/respect and trust on them: (b) idealized influence (behavior) – such leader act as a role model, followers observe him and doing accordingly: (c) inspirational motivation – such leader clarifies the paths for the followers by finishing ambiguities, and communicates the innovative vision: (d) intellectual simulation – such leader support their supporters to solve old problems through innovative or new ways, support creativity, and give confidence by practicing on brainstorming and rational thinking: and (e) individualized consideration – leader consider their followers needs, give them care and attention.

Laissez-faire style (LF) of leadership is in which decisions are delayed, responsibilities are withdrawn, quests for support and feedback, and by showing irresponsiveness in decision making. Such leaders are passive and incompetent, and avoid decisions when needed (Bass and Riggio, 2006). Thus avoidant decision is one of the big quality of laissez-faire leaders. Laissez – faire leaders are dependent on their followers on making decisions, and call workgroup to take their responsibilities (Shamir et al., 2000).

Emotional intelligence (EI) play an important role and are more loyal towards organization performance (Abraham, 2000), and have high success rate (Miller, 1999). Emotional intelligence is the ability to perceive perfectly, and convey emotion; the ability to generate or access feelings; the quality to realized emotional knowledge. Emotional intelligence helps leaders to improve their ability to solve problem and give direction to the organization to achieve its goals effectively. Emotional intelligence based on three models which are (a) competency based model (b) ability model, and (c) non-cognitive model. Competency based model of emotional intelligence were used to measure workplace application. This study utilize competency based model which is related to workplace emotional intelligence.

Research identify various decision making models, each have their own importance, no single model is universally acceptable, that is why this study focuses on the model developed by Scott and Bruce (1995). According to this model while making decisions managers performing five styles: (a) Rational Decision Making Style (RDM) – which is the use of interpretation and rational or logical approaches to decision making; (b) Intuitive Decision Making style (IDM) – such leaders depend upon hunches, gut feelings, and intuition experience; (c) Dependent Decision Making Style (DDM) – is when making a decision getting help or support of others; (d) Avoidant Decision Making Style (ADM) – is ascribed by postponing, retreating, and hostile the decisions; and (e) Spontaneous Decision Making Style (SDM) – is defined by making impetuous, hurried, and nippy decisions.

1.1 Statement of the Problem

A lot of research work has been done on leadership styles as well as on decision making styles but not a single study can find the relationship between them in Pakistan, so, the contribution of this study is to find out the relationship between leadership styles and decision making styles in Pakistani organizations. Second, this study will go beyond the prior research by considering all the three leadership styles and five decision making styles while prior research only one or two leadership styles and one or two decision making styles.

1.2 Purpose of the Study

The purpose of this study is to find out the relationship between leadership styles and decision making styles in Pakistani organization, and to find out which leadership style is more appropriate in Pakistani context. Also, this research will try to answer the question regarding different decision making styles and which decision making style is more appropriate in Pakistani organization. Another important purpose was to check the moderating role of emotional intelligence on the relationship between leadership styles and decision making styles.

1.3 Importance of the Study

The core responsibility of a manager's is to make valuable decisions which helps organization's to achieve its goals. Successful leaders create and build successful organizations. The importance of the study is that it will helpful for managers to follow the most appropriate leadership style as well as decision making style which will help to improve the performance of the overall organization. Another importance is that through appropriate style managers can create a learning organization, increased innovation, and motivates employees which altimetry improve the overall performance of the organizations.

1.4 Plan of the Study

The study is organized as follow: section two describe relevant literature, section three explain theoretical framework and hypothesis of the study, section four explore the methodology of the study in which we describe sampling technique, measurement tools, population of the study, section five describe the results of the study including correlation, regression analysis with and without moderating variable, and lastly section six shows references of the study.

2. Literature Review

The terms transformational and transactional leadership styles were introduced by Burns in 1978. Bass (2000), Bass and Avolio (2003), and Bass and Reggio (2006), extended the previous work on leadership styles and proposed a full range theory which includes transactional, transformational, and laissez- faire leadership styles. Transformational leaders make knowledge based decisions which in turn secured organizational interests (Brower and Balch, 2006). Leaders logical actions and emotions resides rationality which involve inspiration and stimulation. An effective leadership incorporates both sides in consideration (Bass, 1999; Gar 1999). Both rational and emotional strategies were used by transformational leaders in decision making process.

Avolio and Bass, (2002) found that decision making of transactional and transformational leaders could be participative or authoritarian as well as directive and participative, elitist or leveling. Transformational leaders shared organizational vision and ideas (Bass and Reggio, 2006). They encouraged follower's participation. Transformational leader's decisions were based on information sharing which become collective decisions of an enterprise. Fischhoff, (1992) argued that consultation led managers to inappropriate contradictory advices which ultimately affect on decision making.

Downey et al. (2006) found that managers displaying more transformational leadership had also more emotional intelligence (EI) and intuition than managers having less transformational leadership. Hansson and Anderson, (2001) argued that the most appropriate decision making styles is intuitive decision making style in case where organizations were pressurize to bring change.

Tambe and Krishnan, (2000) investigated the correlation between decision making styles and transformational leadership, and found positive correlation between rational decision making styles and negative correlation with avoidant decision making styles. Rehman and Waheed, (2012) studied the relationship between transformational leadership style and decision making styles with moderating role of emotional intelligence in Pakistan. The results show that transformational leadership style strongly predicts rational and dependent DMC, and weakly predict spontaneous and intuitive DMC. The study also found that emotional intelligence plays its moderating role and strengthen the relationship between transformational leadership and decision making styles.

Kroeck and Sivasubramaniam, (1996), studied leadership styles and their impact on innovative work behavior and found positive relationship between transformational leadership and innovative work behavior. However, some studies also found no relationship between them such as Jaskyte (2004); found no significant relationship between leadership styles and innovative work behavior.

Riaz and Haque, (2012) studied the role of leadership styles in their predictive quality of decision making styles and found that most effective decision makers are transformational and transactional leaders. Almas (2007) found that conflicts in manufacturing organizations are effectively managed by transformational leaders. Engen, (2003) found that transformational leadership qualities are mostly found in female as compared to their male counterparts. They also found that male are mostly transactional and laissez-faire, however, some studies found no gender differences in leadership styles.

The word transactional is based on the exchange between two things i.e. leaders and followers. Leader motivates their followers that their needs will be satisfied on exchange the leader demand to meet the standard of the organization and fulfilling their duties. Rewards system are based on performance (Avolio and Bass, 2000; 2002).

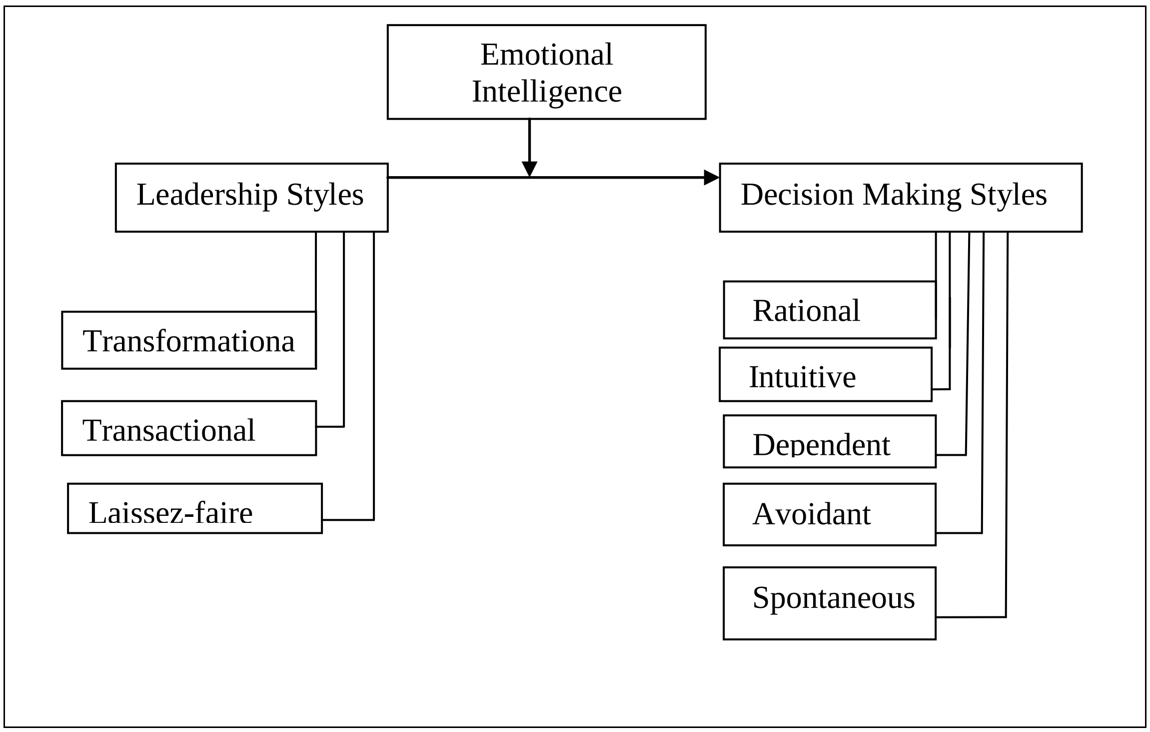
Transactional leaders employ logic in decision making. They are rational decision makers and problem solvers. While making decisions, transactional leaders depend upon the subordinates cognitions, and are extrinsically motivated to lead (Borbuto et. al; 2000). Transactional leaders rely on logic and rational thinking, and offer rewards such as pay, promotion, other jobs related benefits, in exchange for completion of work assignment (Fulton and Maddock, 1998).

Wooten et al. (1994); found that rational decision makers are static organized and unchanged routine activities. That is why transactional leaders are effective in transactional management practices which are compulsory to keep the organizational operations on track (Lane and Daft, 2002), on the other hand, reliance on hunches and quick procedure are the quality of spontaneous and intuitive decision maker (Scott and Bruce, 1995), that is why, decision making styles like intuitive and spontaneous are not make by transactional leaders. Loo, (2000); found negative correlation between avoidant and rational DMC. Barbuto et al. (2000); argued that transactional leaders are dependent decision makers. While making decision they depend upon the subordinates cognitions. Transactional leaders are considered appropriate for maintaining stability in organization (Leavitt, 1987).

3. Theoretical framework and hypothesis development

3.1 Theoretical framework

Theoretical model of the study as that leadership styles is our independent variable which includes three types of leadership styles i.e. laissez-faire, transactional, and transformational leadership styles. Dependent variable is decision making styles which include dependent, avoidant, spontaneous, rational, and intuitive, decision making styles. To check the moderating effect we use emotional intelligence is a moderating variable of the study.



Hypothesis

Literature led us to hypnotize the study as;

H1: transformational leadership style will positively predict decision making styles.

H2: transactional leadership style will positively predict decision making styles.

H3: Laissez-faire leadership style will positively predict decision making styles.

H4: Emotional intelligence will play a moderating role in the relationship between leadership styles and decision making styles.

4. Methodology

4.1 Sample

The sample of the study consist of 150 employees from private and public sector organizations including pharmaceutical firms, services organizations and banks, located in Rawalpindi and Islamabad. Due to limited time and resources convenience sampling technique is selected because it is easy and time saving technique to gather data.

4.2 Measures and Procedures

For data collection questionnaire is used which includes three types of scales. The first scale is Multifactor Leadership Questionnaire MLQ (Form-5x) developed by Bass and Avolio (2000). This scale has 21-items in which 15-items of transformational, 3-items of transactional, and 3-items of laissez-faire leadership styles with a cronbach's alpha 0.87. To measure decision making styles the second scale developed by Bruce and Scott (1995) is used which includes 25-items including 5-items related to each DMS with a cronbach's alpha 0.80. The third scale developed by GENOS EI inventory used to measures work place emotional intelligence of the employee's. It consists of 35-items having a cronbach's alpha of 0.89. Four-point Likert rating scale is used for leadership styles to measures the responses ranging from 1= once in awhile 2= sometimes 3= fairly often 4= frequently, if not always. Five-point Likert scale is used for emotional intelligence and decision making styles to measures the responses ranging from 1= strongly disagree to 5= strongly agree. Total 175 questionnaires were distributed from which 150 were received back with a response rate of 85.71%.

5. Results

Table 1
Correlation Matrix

	TF	TR	LF	RDM	IDM	DDM	ADM	SDM
TF	1							
TR	.671	1						
LF	.368	.000	1					
RDM	.008	.113	.056	1				
IDM	.003	.169	.168	.001	1			

DDM	.048	.023	.205	.000	.000	1		
ADM	.001	.037	.015	.000	.000	.000	1	
SDM	.000	.035	.005	.000	.002	.023	.000	1

Table 1 shows Pearson correlation matrix of DMS and LSS. The table shows that all variables are positively associated with each other. Transformational leadership style is significantly associated with rational, intuitive, dependent, avoidant, and spontaneous DMS, while insignificantly associated with transactional and laissez-faire LSS. Transactional leadership style is significantly associated with laissez-faire leadership style, dependent, avoidant, and spontaneous DMS and insignificantly associated with transformational leadership style, rational and intuitive DMS. Laissez-faire LSS is significantly associated with transactional leadership style, rational, avoidant, and spontaneous DMS. Rational DMS is significantly associated with transformational, and laissez-faire LSS, and also with intuitive, avoidant, dependent, and spontaneous DMS, but insignificantly associated with transactional leadership style. Intuitive DMS is significantly associated with transformational LSS, rational, dependent, avoidant, and spontaneous DMS, while insignificantly associated with transactional and laissez-faire LSS. Dependent decision making style is significantly associated with transformational and transactional LSS, rational, intuitive, avoidant, and spontaneous DMS, while insignificant association with laissez-faire leadership style and so on.

Table 2
Correlation with Moderator

	TFEI_ZTF	**TREI_ZTR**	**LFEI_ZLF**	**SDM**	**ADM**	**DDM**	**IDM**	**RDM**	**LF**	**TR**	**TF**
TFEI_ZTF	1										
TREI_ZTR	.480	1									
LFEI_ZLF	.339	.032	1								
SDM	.000	.015	.004	1							
ADM	.001	.022	.012	.000	1						

DDM	.039	.028	.193	.023	.000	1					
IDM	.003	.105	.187	.002	.000	.000	1				
RDM	.005	.105	.034	.000	.000	.000	.001	1			
LF	.343	.000	.000	.005	.015	.205	.168	.056	1		
TR	.657	.000	.000	.035	.037	.023	.169	.113	.000	1	
TF	.000	.493	.369	.000	.001	.048	.003	.008	.368	.000	1

TFEI_ZTF, TREI_ZTR, and LFEI_ZLF are our independent variables with moderator. First we calculate Z score values of these variables and then multiply these values with our independent variables TF, TR, and LF. Now we only explain the association of these variables only because we also explain all other variables in table 1, however there values are changed but we know that if value is less than .05 then we says that there is significant association and if value is greater than .05then we say that it is insignificant association. TFEI_ZTF is significantly associated with rational, intuitive, dependent, avoidant, and spontaneous DMS, also with transformational LSS. While there is insignificant association with TREI_ZTR, LFEI_ZLF, transactional, and laissez-faire LSS. TREI_ZTR is positively and significantly associated with, spontaneous, avoidant, and dependent DMS, and with LFEI_ZLF, transactional and laissez-faire LSS. There is insignificant association of TREI_ZTR with TFEI_ZTF and transformational LSS and with rational and intuitive DMS. LFEI_ZLF is significantly associated with TREI_ZTR, transactional and laissez-faire LSS and with spontaneous, avoidant, and rational DMS. There is also insignificant association of LFEI_ZLF with TFEI_ZTF and transformational LSS and with intuitive DMS.

Table 3

RDM with and without moderator					
Without Moderator			With Moderator		
Variables	Coefficients	Significance	Variables	Coefficients	Significance
Constant	2.716	.000	Constant	21.250	.001

TF	.228	.011	TFEI_ZTF	.068	.117
TR	.085	.350	TREI_ZTR	-.015	.475
LF	.124	.202	LFEI_ZLF	.100	.006
R Square			TF	-1.983	.162
	.072		TR	.549	.370
			LF	-3.154	.008
			R Square	.146	

In the above table we take rational DMS as a dependent variable and transformational, transactional, and laissez-faire as an independent variables. The right hand side of the table shows result with moderator (emotional intelligence), and the left hand side of the table shows result without moderating effect. R Square shows the explanatory power of dependent variable which is 14.6% with moderating effect of emotional intelligence and 7.2% explanatory power without moderating effect. Table shows that our model with and without moderator is significant (.000) and (.001) respectively. Results also show that there is insignificant relationship between TFEI_ ZTF and TREI_ZTR with rational DMS, and positive significant relation with LFEI_ZLF. On the other hand, the left hand side shows that transactional LSS and laissez-faire have positive insignificant relation with rational DMS and positive significant relation with transformational LSS. Moderator improve R Square and constant coefficient but variables coefficient are decreases which shows that emotional intelligence did not moderate the relationship between leadership styles and rational decision making style.

Table 4

DDM with and without moderator					
Without Moderator			With Moderator		
Variables	Coefficients	Significance	Variables	Coefficients	Significance
Constant	2.848	.000	Constant	11.631	.008
TF	.176	.058	TFEI_ZTF	.055	.229
TR	.183	.052	TREI_ZTR	-.003	.881

LF	.033	.743	LFEI_ZLF	.020	.595
R Square			TF	-1.637	.279
	.059		TR	.286	.661
			LF	-.638	.610
			R Square	.073	

Table 4 highlights the results of dependent DMS and LSS with and without moderating effect. There is positive and significant relationship between transformational and transactional LSS with dependent DMS, while there is positive insignificant relationship with laissez-faire LSS. So we can say that transformational and transactional LSS predict dependent DMS. In case of moderator (EI) all three leadership styles have insignificant relationship with dependent DMS, also TREI_ZTR have a negative association. Although, R Square and constant coefficient improve due to moderating effect of emotional intelligence but coefficient of variables shows that there is no significant effect of moderating variable (emotional intelligence).

Table 5

SDM with and without moderator					
Without Moderator			With Moderator		
Variables	Coefficients	Significance	Variables	Coefficients	Significance
Constant	1.971	.000	Constant	17.630	.008
TF	.321	.001	TFEI_ZTF	.121	.009
TR	.112	.239	TREI_ZTR	-.008	.715
LF	.205	.043	LFEI_ZLF	.016	.677
R Square			TF	-3.628	.016
	.131		TR	.349	.589
			LF	-.326	.792
			R Square	.177	

The above table shows that spontaneous decision making style as a dependent variable and transformational, transactional, and laissez-faire leadership styles as an independent variables. Transformational and laissez-faire leadership styles positively and significantly associated with spontaneous decision making style, and positive but insignificant association with transactional leadership style. Thus, transformational and laissez-faire leadership styles predict spontaneous decision making style. In case of moderating effect coefficient constant and R Square are improved but coefficients of variables are decreased, even TREI_ZTR have shown negative association. Although TFEI_ZTF have positive and significant relationship with spontaneous decision making style. Thus, we can say that there is weakly moderate the relationship between leadership styles and spontaneous decision making style.

Table 6

IDM with and without moderator					
Without Moderator			With Moderator		
Variables	Coefficients	Significance	Variables	Coefficients	Significance
Constant	2.845	.000	Constant	6.602	.273
TF	.243	.004	TFEI_ZTF	.038	.360
TR	.079	.356	TREI_ZTR	.033	.097
LF	.069	.447	LFEI_ZLF	-.038	.275
R Square			TF	-1.035	.451
	.072		TR	-.907	.128
			LF	1.306	.251
			R Square	.097	

Table 6 shows the regression analysis between intuitive decision making and leadership styles with and without moderation. Transformational leadership style is positively and significantly associated with intuitive decision making style while transactional and laissez-faire are positively but insignificant associated with intuitive decision making style. So, transformational leadership style predicts intuitive decision making style. On the other hand, there is positive and significant association between TREI_ZTR and intuitive decision making style, while there is insignificant relationship between TFEI_ZTF and LFEI_ZLF with intuitive decision making style. Coefficient of all variables decreased due to moderation which shows that there is no impact of emotional intelligence on intuitive decision making style.

Table 7

ADM with and without moderator					
Without Moderator			With Moderator		
Variables	Coefficients	Significance	Variables	Coefficients	Significance
Constant	2.371	.001	Constant	23.837	.000
TF	.268	.002	TFEI_ZTF	.132	.001
TR	.112	.199	TREI_ZTR	.040	.038
LF	.152	.000	LFEI_ZLF	.009	.794
R Square			TF	-4.075	.003
	.110		TR	-1.075	.064
			LF	-.152	.891

			R Square	.203	

Table 7 highlights the regression analysis between avoidant DMS and LSS. Transformational and laissez-faire LSS are positively and significantly associated with avoidant DMS, while transactional LSS is positively insignificant associated with avoidant DMS. We can say that transformational and laissez-faire LSS predict avoidant DMS. In case of moderating effect of emotional intelligence transformational and transactional have positively associated with avoidant DMS, while laissez-faire have insignificant association. Although, R Square and constant coefficient increased due to moderation but coefficient of variables are decreases in values which shows that emotional intelligence weekly moderate the relationship between avoidant decision making style and leadership styles.

6. Discussion

Present study aim is to investigate the relationship between leadership styles (transformational, transactional, and laissez-faire) and decision making styles (rational, intuitive, dependent, avoidant, and spontaneous) with the moderating role of emotional intelligence. The results of the study fully supported H1 hypothesis that is transformational leadership style positively predicts decision making styles (rational = .011, dependent=.058, spontaneous=.001, intuitive= .004, and avoidant=.002). The results (rational, spontaneous, and intuitive) are consistent with (Tambe and Krishna , 2000 Downey et al. 2006 Andersen, 2000 Avolio and Bass, 2002 Thunholm, 2004). The results (dependent and avoidant) are inconsistent with (Avolio and Bass, 2002 Riaz and Haque, 2012). The results of the study partially support H2 hypothesis that is transactional leadership styles positively predict decision making styles (rational= .350 dependent= .052 spontaneous= .239 intuitive= .356 avoidant= .199). The results (intuitive, spontaneous, and avoidant) are consistent with (Daft and Lane, 2002, Scott and Bruce, 1995 Loo, 2000). The results (rational) are inconsistent with (Barbuto et al. 2000, Maddock and Fulton, 1998). The results regarding dependent decision making is in line with (Barbuto et al. 2000) that transactional leaders are dependent on subordinate's cognitions. The third hypothesis H3 are partially supported by the results that is laissez-faire leadership style positively predict decision making styles (rational= .202

dependent= .743 spontaneous= .043 intuitive= .447 avoidant= .000). The results regarding avoidant decision making style are in line with (Bass and Reggio, 2006 Bass, 1998 Scott and Bruce, 1995) because they are missing when required; they are unable to act upon their intentions. The results regarding dependent decision making style is inconsistent with (Shamir et al. 2000 Jones and Rudd, 2007). The results regarding rational and intuitive decision making styles are in line with (Harren, 1979 Loo, 2000) that laissez-faire leaders are unable to make rational or intuitive decisions. The forth and last hypothesis H4 is that emotional intelligence moderate the relationship between leadership styles and decision making styles are rejected. There is no such result found in the study which shows that moderator plays its role.

7. Conclusion and recommendations

Conclusively, we can say that leadership styles play a significant role in predicting decision making styles. According to the theory and past research the ideal leadership style is transformational leadership style which positively and significantly predicts the ideal decision making style which is rational decision making style. Transactional leadership style positively predicts dependent decision making style. The logic behind that is that transactional leaders depend upon subordinate's cognition's. Laissez-faire leadership style positively predicts avoidant decision making style. The logic is that laissez-faire leaders are lezzy, irresponsive, ineffective, and inactive style of leadership so they avoid or delayed the decisions.

There are also some limitations of the study as well. First, the study use convenience sampling which might not represent the population as a whole. It will better if the study uses other sampling techniques which are more generaliseable. Second, there are limited observations (150) by selecting only two cities which affect the generaliseability of the results. Third, the study use emotional intelligence as moderating variable but did not focus on three facets of emotional intelligence separately which is (1) emotional awareness of self (2) others (3) and emotional reasoning. The present research suggests that it will more helpful for future work to increase the sample size and to use other dimensions of emotional intelligence as well.

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The Impact of Working Capital Management on Profitability of Cement Industry in Pakistan

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Abstract

The study examines the impact of working capital in the cement industry of Pakistan. Moreover, the study outlines the main determinants of working capital in the cement industry of Pakistan. The determinants of working capital are related to the factors associated with Current ratio, Quick ratio, Inventory Turnover ratio, Account Receivable Turnover ratio, Debt Equity Ratio. The data to be taken for analysis consist of accounts of 2005-2012, policies and procedures of the company and methods used by the company. We are Studying the impact of working capital management over profitability of cement industry of Pakistan. For this purpose we have used five independent variables namely CR, QR, ART, ITR and DE for measuring working capital and two dependent variables ROA, ROE for measuring profitability. Secondary data of 18 cement companies listed in KSE have been used and regression and correlation analysis has been run through E-viwes and following results are reported. In model 1Out of the five ratios selected for the study three ratios, namely CR, QR, D/E, and IRT registered positive correlation with the selected profitability ratio, ROA. ART has negative correlation with ROA and CR, QR, ART and ITR have insignificant relationship with ROA. Only DE ratio has significant relationship with ROA. In Model 2 five ratios selected for the study and all five ratios CR, QR, D/E, ITR and IRT registered positive correlation with the selected profitability ratio, ROE. But ART, ITR and QR have significant positive relationship with ROE and CR, and DE has insignificant relationship with ROE. It means when ART, ITR and QR are increased it will put significant positive impact on profitability ratio (ROE). Hence, the study of the impact of working capital ratios on profitability viewed both negative and positive impacts. The study of the relationship between the profitability and working capital, ratios confirm with accepted rule that larger the turnover increases the profitability of the company.

Keywords: Working Capital; Current Ratio; Quick Ratio; Debt to equity Ratio; Account Receivable; Inventory Turnover Ratio; Profitability

Introduction

Working capital management is a very essential component of corporate finance because it directly influences the profitability of the company. When we are talking about the company's working capital is what makes it profitable or not profitable. The more working capital a company has the better that company is doing, financially. Many potential investors and others in the public field will scrutinize a balance sheet to find the working capital calculation of a company. Working capital usually consists of current assets less current liabilities. Positive working capital means that the company is able to pay off its short-term liabilities. Negative working capital means that a company currently is unable to meet its short-term liabilities with its current assets. Determination of appropriate level of investment in current assets is the first and foremost responsibility of working capital manager.

Working capital refers to the cash a business requires for day-to-day operations, or, more specifically, for financing the conversion of raw materials into finished goods, which the company sells for payment. Among the most important items of working capital are levels of inventory, accounts receivable, and accounts payable. Analysts look at these items for signs of a company's efficiency and financial strength. Working capital is used by lenders to help gauge the ability for a company to weather difficult financial periods. Working capital is calculated by subtracting current liabilities from current assets. Due to differences in businesses and the fact that working capital is not a ratio but an absolute amount, it is difficult to predict what the ideal amount of working capital would be for the business.

The determination of appropriate level of working capital can be effect upon the profitability working efficacy and strength of the business. Working capital is the parameter of capital budgeting that predicts and indicates the short terms assets and liabilities. Positive working capital is the strength of the business that can enhance the profitability of the business project and negative working capital is the bed prediction for the business and future outcome. When we are taking about business philosophy, theory and design than that means the working capital is the substantial dimension of the business. It must be positive and moderate level at any cost in the business. Than it must be consider the all characteristic of the capital budgeting or investment appraisal is planning process used to determine whether the organization is long term and short term both the dimension of the investment. Long term investment means such as new machinery new plant and new products research and development projects are worth perusing. It is budget for major capital or investment expenditure. The above mentioned long term investment strongly correlated with working capital management or operationalization of the business. How much capital is required to meet day to day expenditure or operationalization of the project?

Working capital is the major function of finance. There are three types of decision in finance

1. Investment decision
2. Financing decision
3. Dividend decision

   The decision with regards to long term assets is called capital budgeting. The decision with regards to short term or current assets is called working capital management.

The capital required for the business can be classified under two main categories

1. Fixed Capital
2. Working capital

The term working capital refers to current assets which may be defined as (i) those which are convertible into cash or equivalents within a period of one year, and (ii) those which are required to meet day to day operations. The fixed assets as well as the current assets, both require investment of funds.

So, the management of working capital and of fixed assets, apparently, seem to involve same type of considerations but it is not so.

The management of working capital involves different concepts and methodology than the techniques used in fixed assets management. The very basics of fixed assets decision process (i.e., the capital budgeting) and the working capital decision process are different. The fixed assets involve long period perspective and therefore, the concept of time value of money is applied in order to discount the future cash flows; whereas in working capital the time horizon is limited, in general, to one year only and the time value of money concept is not considered. The fixed assets affect the long term profitability of the firm while the current assets affect the short term liquidity position. The fixed assets decisions are irreversible and affect the growth of the firm, whereas the working capital decisions can be changed and modified without many implications.

Managing current assets may require more attention than managing fixed assets. The financial manager cannot simply decide the level of the current assets and stop there. The level of investment in each of the current assets varies from day to day, and the financial manager must therefore, continuously monitor these assets to ensure that the desired levels are being maintained. Too large an investment in current assets means tying up funds that can be productively used elsewhere (or it means added interest cost if the firm has borrowed funds to finance the investment in current assets). Excess investment may also expose the firm to undue risk e.g., in case, the inventory cannot be sold or the receivables cannot be collected.

On the other hand, too little investment also can be expensive. For example, insufficient inventory may mean that sales are lost as the goods which a customer wants are not available. The result is that the financial managers spend a large chunk of their time managing the current assets because level of these assets changes quickly and a lack of attention paid to them may result in appreciably lower profits for the firm. So, in the working capital management, a financial manager is faced with a decision involving some of the considerations as follows:

1. What should be the total investment in working capital of the firm?
2. What should be the level of individual current assets?
3. What should be the relative proportion of different sources to finance the working capital requirements?

Thus, the working capital management may be defined as the management of firm's sources and uses of working capital in order in maximize the wealth of the shareholders. The proper working capital management requires both the medium term planning (say up to three years) and also the immediate adaptations to changes arising due to fluctuations in operating level of the firm.

The term working capital may be used in two different ways.

i) Gross Working Capital (or Total Working Capital): The gross working capital refers to the firm's investment in all the current assets taken together. The total of investments in all the individual current assets is the gross working capital. For example, if a firm has a cash balance of Rs. 50,000, debtors of Rs. 70,000 and inventory of raw material and finished goods has been assessed at Rs. 1,00,000, then the gross working capital of the firm is Rs. 2,20,000 (i.e. Rs.50,000 + Rs.70,000 + Rs.1,00,000).

ii) Net Working Capital: The term net working capital may be defined as the excess of total current assets over total current liabilities. It may be noted that the current liabilities refer to those liabilities which are payable within a period of 1 year. The extent, to which the payments to these current liabilities are delayed, the firm gets the availability of funds for that period. So, a part of the funds required to maintain current assets is provided by the current liabilities and the firm will be required to invest the funds in only those current assets which are not financed by the current liabilities.

The net working capital may either be positive or negative. If the total current assets are more than total current liabilities, then the difference is known as positive net working capital, otherwise the difference is known as negative net working capital. The net working capital measures the firm's liquidity. The greater the margin (i.e., net working capital) by which the firm's current assets cover its current liabilities, the better will it be. Although the firm's current assets may not be converted into cash precisely when they are needed, still greater net working capital assures that in all likelihood some current assets will be converted into cash to pay the current liabilities.

The distinction between gross working capital and net working capital does not in any way undermine the relevance of the concepts of either gross or net working capital. A financial manager must consider both of them because they provide different interpretations. The gross working capital denotes the total working capital or the total investment in current assets. A firm should maintain an optimum level of gross working capital. This will help avoiding (i) the unnecessarily stoppage of work or chance of liquidation due to insufficient working capital, and (ii) effect on profitability (because over flowing working capital implies cost). Therefore, a firm should have just adequate level of total current assets. The gross working capital also gives an idea of total funds required for maintaining current assets.

On the other hand, net working capital refers to the amount of funds that must be invested by the firm, more or less, regularly in current assets. The remaining portion of current assets is being financed by the current liabilities. The net working capital also denotes the net liquidity being maintained by the firm. This also gives an idea of buffer available to the current liabilities.

Thus, both concepts of working capital i.e., the gross working capital and the net working capital have their own relevance and a financial manager should give due attention to both of these.

Some time, If creditors demands their money from company, at this time company's high working capital saves company from this situation. You know that selling of current assets are easy in small period of time but Company cannot sell their fixed assets with in small period of time. So, If Company have sufficient working capital, Company can easily pay off the creditors and create his reputation in market. But if a company has zero working capital and then company can not pay creditors in emergency time and either company becomes bankrupt or takes loan at higher rate of Interest. In both condition, it is very dangerous and always Company's Account Manager tries to keep some amount of working capital for creating goodwill in market.

Positive working capital enables also to pay day to day expenses like wages, salaries, overheads and other operating expenses. Because sufficient working capital can not only pay maturity liabilities but also outstanding liabilities without any more delay.

One of the advantages of positive working capital is that company can do every risky work without any tension of self security.

Objectives of the Study

The present study fulfills the following objectives.

• To assess the impact of working capital on profitability.

• To examine the combine effect of the ratios relating to working capital management and profitability with the assistance of multiple correlation coefficient and multiple regression equation and to test the significance of the regression coefficients.

- To measure the appropriate level of working capital in the capital budgeting
- Working capital is the essential elements of the corporate finance.
- For the discovery of better results and outcomes that can be possible by the determination of the moderate level of working capital management.

Literature Review

The negative relationship between accounts receivables and firms' profitability suggests that less profitable firms will pursue a decrease of their accounts receivables in an attempt to reduce their cash gap in the cash conversion cycle. Likewise the negative relationship between number of days in inventory and corporate profitability suggests that in the case of a sudden drop in sales accompanied with a mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations (Lazaridis, 2000; & Tryfonids, 2000).

In one study it was suggested that a priori is impossible to predict the impact on the current ratio, quick ratio, cash conversion cycle, profits and leverage when a change in sales causes a change in working capital variables (Katerina, 2000; Lazaridis, j. 2000). Likewise, a managerial decision that changes components of working capital will cause an unpredictable change in the liquidity, profitability and leverage ratios. Overall, the cash conversion cycle was significantly positively related to the current and quick ratios, to the receivables and to the inventory conversion period.

Most of the Pakistani firms have large amounts of cash invested in working capital. It can therefore be expected that the way in which working capital is managed will have a significant impact on profitability of those firms.

We have found a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of Pakistani firms listed on Karachi Stock Exchange. These results suggest that managers can create value for their shareholders by reducing the number of day's accounts receivable and inventories to a reasonable minimum. The negative relationship between accounts payable and profitability is consistent with the view that less profitable firms wait longer to pay their bills. On basis of the above analysis we may further conclude that these results can be further strengthened if the firms manage their working capital in more efficient ways. Management of working capital means “management of current assets and current liabilities, and financing these current assets”. If these firms properly manage their cash, accounts receivables and inventories in a proper way, this will ultimately increase profitability of these companies (Rehman, 2007; Nasr, 2007).

Working capital and liquidity of the company concluded, the increase in the profitability of the company was less than the proportion to decrease in working capital. Working capital management and profitability of the company disclosed both negative and positive association number of negative association only one positive association of ROI. (Raman, P., 2003)

Most firms have a large amount of cash invested in working capital. It can therefore be expected that the way in which working capital is managed will have a significant impact on the profitability of firms. In this paper a significant negative relation between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms has been found. The negative relation between accounts payable and profitability is consistent with the view that less profitable firms wait longer to pay their bills.

Deloof, (2003) proved that the degree of net working capital as a proportion of the overall financing required, the higher the net working capital the greater being the impact of inflation on capital spending.

(Geofrey, T., 1996) explained the impact of aggressive/conservative working capital investment and financing policies has been examined through cross-sectional regression models between working capital policies and profitability as well as risk of the firms. We found a negative relationship between the profitability measures of firms and degree of aggressiveness of working capital investment and financing policies. The firms yield negative returns if they follow an aggressive working capital policy.

Researchers (Talat, 2007; Nazir, 2007) further elaborated that the working capital needs of an organization change over time as does its internal cash generation rate. The study has shown that the paper and printing industry has been able to achieve high scores on the various components of working capital and this has positively impact on its profitability.

(Kesseven, p., 2006) further Analyzed, Analysis of working capital management efficiency was done on a sample of 349 telecommunication equipment companies. It is found that the working capital management efficiency is negatively associated to the profitability and liquidity. When the working capital management efficiency is improved by decreasing days of working capital, there is improvement in profitability of the firms in telecommunication firms in terms of profit margin. It is also found that the inventory management among the sample firms may not be efficient.

The statistical evidences indicate that the management of a company does not have much impact on the return on assets and profit margin. This is mainly due to heavy fixed assets requirements in telecommunication industry. There is also evidence that there is poor management of accounts receivable and accounts payable (Vedavinayan, G., 2007).

An empirical evidence of working capital management policies and practices of the private sector manufacturing companies in srilanka was provided by (Pandey, 1997; Parera, 1997). They found that most companies in srilanka have informal working capital policies and company size has an influence on the overall working capital policy and approach. Moreover, company profitability has an influence on the methods of working capital planning and control. This article attempts to place working capital policy in perspective with other policies of the small business. Contrary to common usage, working capital policy should be expressed in terms of asset liquidity, deferability of current liabilities, predictability of sales, and composition of financing (particularly debt), rather than in terms of net working capital magnitude (CA minus CL). The distinction is critical for the small business because: (1) initial liquidity is generally poor; (2) postpone-ability of current liabilities is both an unknown and risky element; (3) sales predictability —when attempted—is low; and (4) long-term capital is difficult to obtain. Those interested in maintaining and extending the small business sector should increase interest in this critical area (Brian, B., 1996).

When working capital is managed improperly, allocating more than enough of it will render management non-efficient and reduce the benefits of short term investments. On the other hand, if working capital is too low, the company may miss a lot of profitable investment opportunities or suffer short term liquidity crisis, leading to degradation of company credit, as it cannot respond effectively to temporary capital requirements (Nazir, M., 2008; Afza, T., 2008).

Working capital management is particularly important in the case of small and medium-sized companies. Most of these companies' assets are in the form of current assets. Also, current liabilities are one of their main sources of external finance. In this context, the objective of the current research has been to provide empirical evidence about the effects of working capital management on the profitability of a sample of small and medium-sized firms. To this end, a sample of Spanish firms was used to conduct a study with panel data for SMEs. Data on a panel of 8,872 SMEs was collected, covering the period from 1996 to 2002. The results are similar to those found in previous studies that focused on large firms and the analyses carried out confirm the important role of working capital management in value generation in small and medium-sized firms. There is a significant negative relation between an SME's profitability and the number of day's accounts receivable and days of inventory. I cannot, however, confirm that the number of day's accounts payable affects an SME's return on assets (Pedro et al., 1996).

Regarding the influence of international sales levels on the use of the working capital management vehicles, the results show that international sales levels have little impact. As one would expect, the number of foreign banks and overseas demand deposit amounts are significantly related to international sales levels. The level at which working capital decisions are made is not dependent on international sales levels, perhaps an indication that corporate culture concerning decision-making plays a larger role than international sales levels (Ricci, C., 1996; Vito, D., 1996).

The inefficiency of a firm's working capital management is positively correlated with firm size and uncorrelated with its industry's concentration. I interpret these results as suggesting that firms are not using their market power at the margin to improve the efficiency of their working capital management practices. Instead, they tend to follow the practices of their industry (Robert et al., 2006).

Increases in the current ratio and debt ratios are negatively associated with profitability and risk adjusted return. Profitability is also significantly negatively related to the current ratio. In other words, liquidity and profitability are clearly inversely related (Shin, 1998; Soenen, 1998).

Working capital management relates to the source, and application of short-term capital. When working capital is managed improperly, allocating more than enough of it will render management non-efficient and reduce the benefits of short-term investment. On the other hand, if working capital is too low, the company may miss profitable investment opportunities or suffer short-term liquidity crises, leading to degradation of company credit, as it cannot respond effectively to temporary capital requirements.

Chiou and Cheng' (2006) the research presented here is based on the annual ratings of working capital management published in CFO magazine. Our findings indicate a consistency in how industries "stack up" against each other over time with respect to the working capital measures. However, the working capital measures themselves are not static, with our results indicting significant movements across our entire sample over time. Our findings are important because they provide insight to working capital performance across time, and shine light on working capital management across industries.

Filbeck & Krueger' (2003) this study looked at ten diverse industry groups to examine the relative relationship between their aggressive/conservative working capital policies. Regarding the degree of aggressive asset management, the industries had distinctive and significantly different policies. In addition, the relative nature of the asset policies between industries exhibited remarkable stability over the ten year study period. Industry policies concerning the relative degree of aggressive liability management also were significantly different, but not to the same extent or with the same stability. Interestingly, Weinraub and Visscher (1998) study also showed a high and significant negative correlation between industry asset and liability policies. In general, it appears that when relatively aggressive working capital asset policies are followed they are balanced by relatively conservative working capital financial policies. It should be apparent that increased direct investment requires additional working capital.

Consequently, they surveyed executives of Japanese-owned companies to determine their working capital practices. In this survey, they discovered that the most important objective of working capital management by Japanese investors was to provide various current assets and short-term credit necessary to support anticipated sales. No other objective rated close to this one. In addition, the respondents reported that they obtained most of their short-term funds from Japanese sources, thus rising -the possibility that they participate in the keiretsu system (Suk et al., 1992).

Eljelly (2004) elucidated that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet due short-term obligations and avoids excessive investment in these assets.

The relation between profitability and liquidity was examined, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia using correlation and regression analysis. The study found that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability. The size variable was found to have significant effect on profitability at the industry level. The results were stable and had important implications for liquidity management in various Saudi companies. First, it was clear that there was a negative relationship between profitability and liquidity indicators such as current ratio and cash gap in the Saudi sample examined. Second, the study also revealed that there was great variation among industries with respect to the significant measure of liquidity.

Ghosh and Maji' (2003) study shows to examine the efficiency of working capital management of the Indian cement companies during 1992 – 1993 to 2001 – 2002. For measuring the efficiency of working capital management, performance, utilization, and overall efficiency indices were calculated instead of using some common working capital management ratios. Setting industry norms as target-efficiency levels of the individual firms, this paper also tested the speed of achieving that target level of efficiency by an individual firm during the period of study. Findings of the study indicated that the Indian Cement Industry as a whole did not perform remarkably well during this period.

It was examine the influence of a firm's industry on its working capital management (Hawawini et al., 1986). Using data on 1,181 U.S. firms over the period 1960 to 1979, they conclude that there is a substantial industry effect on firm working capital management practices that is stable over time. From these studies, I conclude that sales growth and industry practices are important factors influencing a firm's investment in working capital.

According to (Moyer *et al*., 1998), firms have two goals - liquidity and profitability. Many types of costs are related to the excesses and shortages of working capital levels of investment and financing. Managing these costs can increase the profitability of a firm's operations. Firms have to determine the individual and joint impact of the levels of short-term investment and financing on the dual objectives of working capital management. These goals imply that decisions that tend to maximize profitability tend not to maximize the chances of adequate liquidity. Conversely, focusing almost entirely on liquidity will tend to reduce the potential profitability of the firm.

Most business operations affect or are affected by working capital operations (purchase of materials for production, production of finished goods and sales of finished goods to customers). Purchases of material result in increasing the investment, payment of cash, or increasing payables. Production results in increasing work in process inventory and finished goods inventory. Sales end-up in decreasing finished goods inventory, and increasing cash or receivables. The management of these activities is very time consuming and may even demand more time if the working capital investments and short-term financing are actively managed. It is therefore normal for managers to spend much of their time in activities directly or indirectly related to working capital investments and short-term debts (Scherr, 1989).

Raw material inventories are used to make production scheduling easier, to take advantage of price changes and quantity discounts, and to hedge against supply shortages. If raw material inventories were not held, purchases would have to be made continuously at the rate of production. This would not only mean high ordering costs and less quantity discounts, but also production interruptions when raw materials cannot be procured in time. Therefore, the firm has an interest in buying enough raw materials to provide an effective cushion between purchases and production (Horim, 1987).

Horne and Wachowicz' (1998) study shows us that On the basis of the stability of balances compared to changes in the volume of sales and production, current assets can also be divided into permanent and fluctuating. The balance of permanent current assets remains constant regardless of the change in sales volume or production capacity, while fluctuating current assets vary with a change in sales volume and production capacity. Permanent current assets include the safety stocks of cash and inventories. They are often used to meet the long-term minimum needs of investment in current assets. Their balance is constant over a longer period of time and is therefore comparable with the firms fixed assets because investments in permanent current assets remain within the firm. The main difference between permanent current assets and fixed assets is that permanent current assets constantly change in physical terms, while fixed assets do not.

Due to the large size of inventories maintained, firms commit a considerable amount of funds to inventories. Therefore, in order to avoid unnecessary investments it is absolutely imperative to manage inventories efficiently. Neglecting the management of inventories will jeopardize a firm's short and long-term profitability. Inventories are the least liquid of all current assets; it should therefore provide the highest yield to justify investment **(**Block, 1992; Hirt, 1992). Overall, in line with that of cash there are three motives for holding inventories – the transactions motive, the precautionary motive and the speculative motive. The transaction motive emphasize on the need to maintain inventory in order to facilitate smooth production and sales operations. Inventory held for precautionary motive guards against the risk of unpredictable changes in inventory price, demand and supply factors. The speculative motive refers to carrying inventory in order to take advantage of unpredictable changes in inventory price. To be effective, management has to apply a system to keep track of inventory on hand and on order, knowledge of lead times and its variability, a reliable forecast of inventory demand and reasonable estimates of inventory holding, ordering and shortage costs (Stevenson, 1982). Williamson (1985) pointed out cultural practices, believes and norms also determine practical management approaches. The study of working capital management has to be designed in such-away that it takes full consideration of the government regulations and cultural factors. Management in general and that of working capital in particular, has become a two-edged sword - internal and external. Internally various working capital approaches are used to maximize the benefit and reduces the costs of working capital, Externally the firm-supplier-customer linkages are managed such that the business to business cooperation results in synergy effects on firm value. This is achieved by reducing inter-firm transaction costs and creates firm value in a win-win condition **(**Rubin, 1998; Alvarez, 1998).

(Yeager, 1989; Seitz, 1989) further elaborated when liquidity is maintained through borrowing, there will be a trade-off between the interest costs paid to creditors and the income earned from the investment in the assets financed from the borrowing. Therefore, both too much and too little liquidity have costs. (Fafchamps, 1997) the study indicates that the Firms would rather sell for cash than on credit, but competitive pressure forces most companies to offer trade credits. Unlike credit from financial institutions, trade credit does not rely on formal collateral but on trust and reputation. According to (Stickney, 1996), cash flow based valuation gives a better picture of a firm's operating efficiency. This is mainly because of two reasons. First, cash is the ultimate source of value, that is, when firms invest in resource they delay current consumption and it is the medium of exchange that will permit them to consume various goods and services in the future. He argues that a resource has value because of its ability to provide future cash flows. Second, cash serves as a common measuring unit of future benefits and to compare future benefits of alternative operating and investment opportunities.

Hypotheses

Ha0*: Current Ratio does not have significant impact on profitability*

Ha1*: Current Ratio has significant impact on profitability*

Hb0*: Quick Ratio does not have significant impact on profitability*

Hb2*: Quick Ratio has significant impact on profitability*

Hc0*: Debt Equity does not have significant impact on profitability*

Hc3*: Debt Equity has significant impact on profitability*

Hd0*: Accounts Receivable Turnover does not have significant impact on profitability*

Hd4*: Accounts Receivable Turnover have significant impact on profitability*

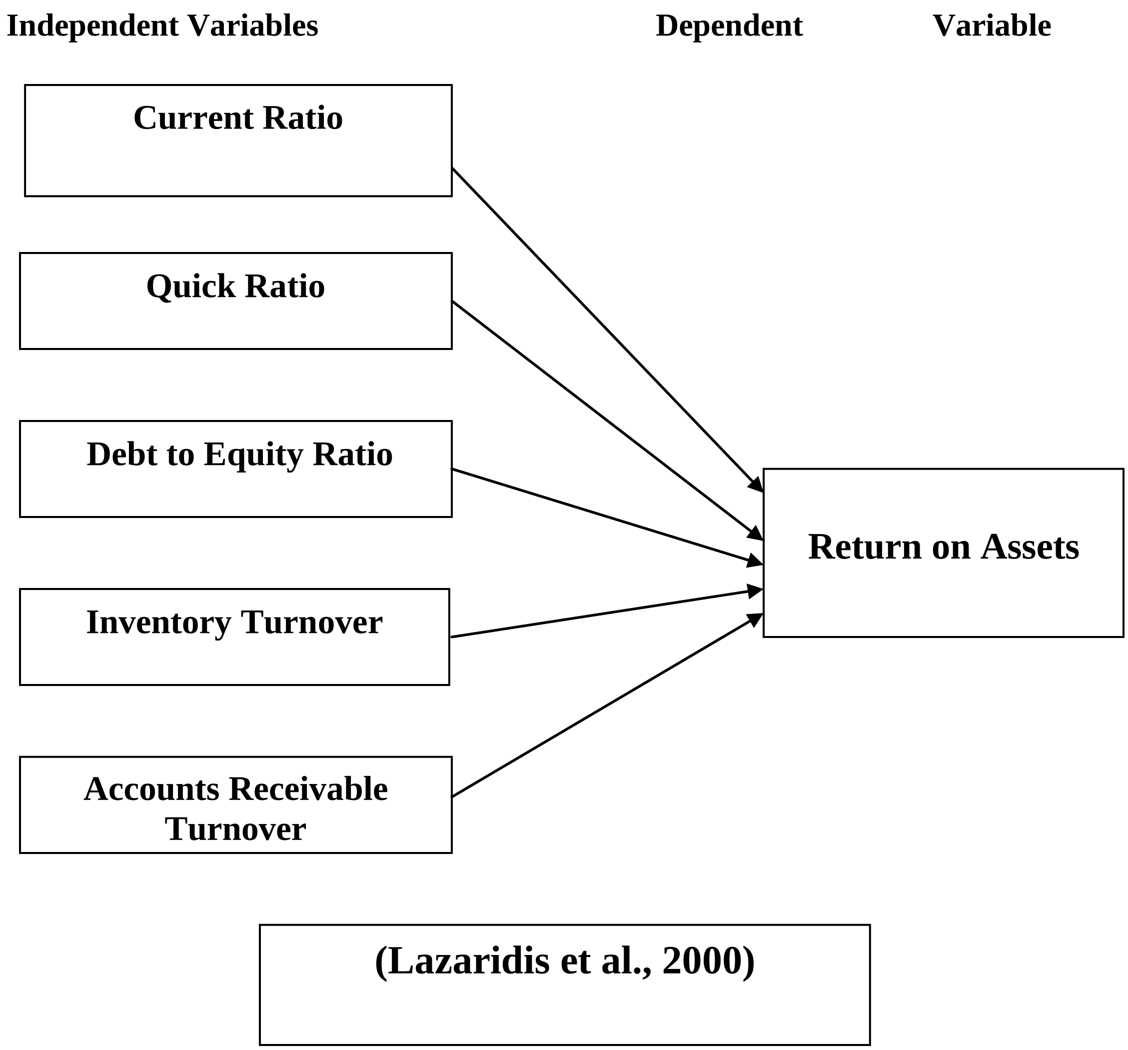
He0*: Inventory Turnover does not have significant impact on profitability*

He5*: Inventory Turnover have significant impact on profitability*

Model 1

$Y=b0 + b_1\ CR + b_2\ QR + b_3\ D/E + b_4\ ITR + b_5\ ART + \varepsilon$

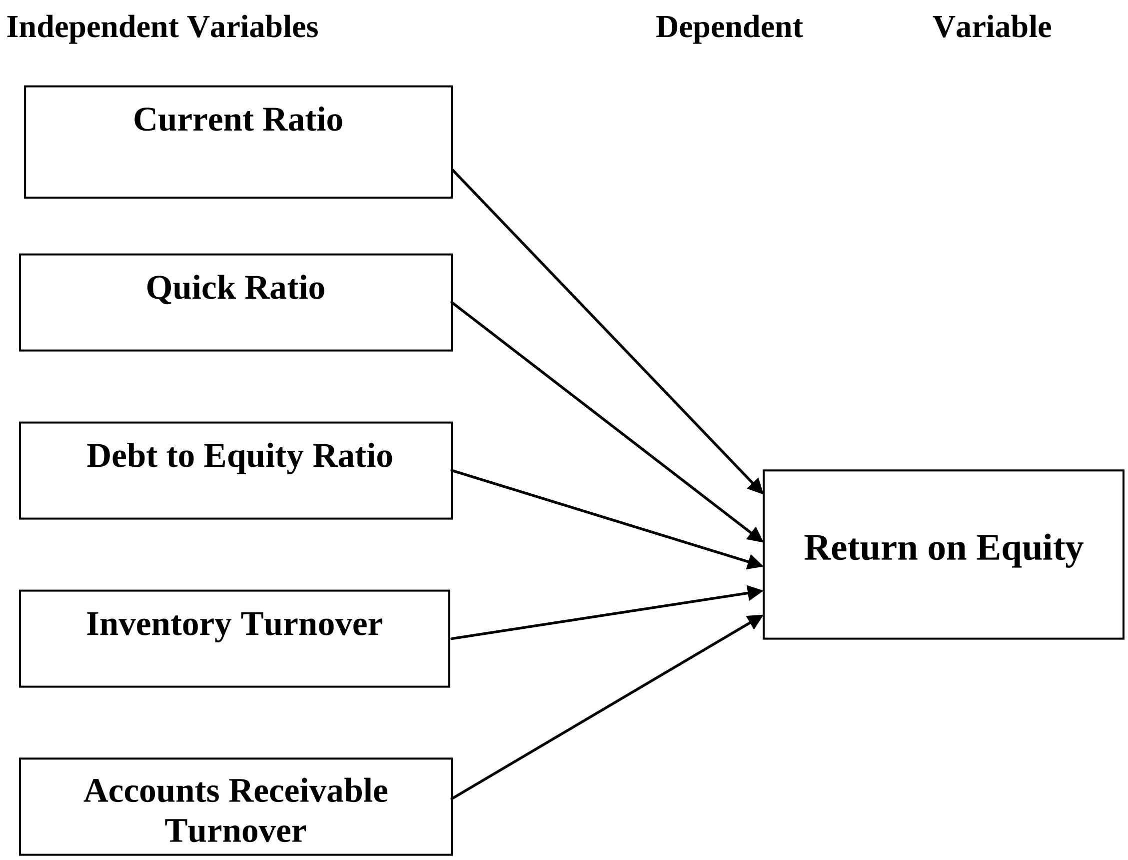
Theoretical Model 1



Model 2

Y=b0 + b1 CR + b2 QR+ b3 D/E+b4 ITR +b5 ART+ ε

Theoretical Model 2



(Lazaridis et al., 2000)

Methodology

The study is designed to measure the relationship among the working capital and profitability.

Population

The population for the current research work is cement industry of Pakistan.

Sampling

Researcher have selected the all 18 listed companies of cement industry from KSE: Pioneer cement, Fauji cement, Cherat cement, D.G.Khan cement, Al-Abbas, Bestway, Dandot Cement, Dewan cement, Fecto cement, Attock Cement etc.

Research Instruments and Data Collection

Annual reports, financial statements of the companies and published articles about the performance of cement sector of Pakistan have been used in the study. The data is taken by the State Bank website.

Data Analysis Methods

The data of 18 firms in cement industry for the years 2005 to 2012 used in this study have been taken from mainly secondary sources. The necessary secondary data have been collected from the financial statements published in the Annual Reports of the cement companies. Editing, classification and tabulation of the financial data collection from the above-mentioned source have been done as per the requirements of the study. For assessing the performances of the financial data collected form the above-mentioned source have been done as per the requirements of the study. For analyzing data simple mathematical tools like ratios, percentage and various statistical tools have been used.

The ratios relating to working capital management which have been selected and computed for the study are:

The independent variables of the study are as follows:

(i) Current Ratio (CR)

(ii) Quick Ratio (QR)

(iii) Debt to Equity Ratio (D/E)

(iv) Accounts Receivable Turnover Ratio (ART)

(v) Inventory Turnover Ratio (ITR)

Dependent variables of the study are as follows:

i) Return on Assets (ROA)

(ii) Return on Equity (ROE)

Results, Discussion & Operationalization

After collecting the data from SBP website as per our econometrics model we will calculated the
Variables as follow:

Return on Assets (ROA) = Net Income / Total Assets

Return on Equity (ROE) = Net Income / Total Assets

Current Ratio (CR) = Current Asset / Current Liabilities

Quick Ratio (QR) = Current Asset_-Inventory / Current Liabilities

Debt/ Equity Ratio (DE) = Total Liabilities / Total Shareholder Equity

Inventory Turnover Ratio (ITR) = Cost of Goods Sold / Inventories

Account Receivable Turnover (ART) = Sale on Credit / Account Receivable

With the help of above formulas all variable are computed in the excel sheet than populated all variable in Eviews than with the help of plotting graph in Eviews to identify outliers and remove all abnormal outliers from the all variables data series which are also not justifiable by economics rational. So remove all outliers which are against economic theory than check heterokedasticty.

Detecting Heterokedasticty

Study used white hetroskedasticity test to test the presence and absence of hetroskedasticity in the given data.

Detecting Autocorrelation

After detecting the heterokedasticty than check is there is any auto correlation of times series with its lags values. For this first of all we will used the Breush Godfry seriel

Correlation LM test. It is found that the autocorrelation of first degree exist in the data because p value of Resid (-1) is significant. When again run this test by putting no. of lags = 2 than p value of resid(-2) become insignificant. Therefore first order auto correlation exists. Autocorrelation is addressed by putting AR (1) term in the main equation due to which autocorrelation becomes insignificant.

Descriptive Statistics

Table 1 show the descriptive statistics result. ROA data series has means value of 1.103 and median of 0.70 and maximum point is 11.00 and minimum point of -7.30 and volatility in RoA is 5.16 and the data is positively skewed and the kurtosis is < 3 there the shape of curve is flatter. ROE data series has means value of 2.846 and median of 2.8 and maximum point is 28.8 and minimum point of -21.10 and volatility in RoE is 13.56 and the data is positively skewed and the kurtosis is < 3 there the shape of curve is flatter. QR data series has means value of 51.39 and median of 49.6 and maximum point is 93.8 and minimum point of 16.1 and volatility in QR is 23.22 and the data is positively skewed and the kurtosis is < 3 there the shape of curve is flatter. The Volatility in CR, DE, ITR and ART is 27.24, 42.84, 8.20.217.12 respectively. The Coefficient of Skewness is positive in all data series therefore there is positively skewed distribution and the value of Kurtosis show that shape of curve is flatter except the ART data series which have picked curve because kurtosis is >3.

Descriptive Statistics Table: 1

	ROA	ROE	QR	CR	DE	ITR	ART
Mean	1.103	2.846	51.395	59.93	116.37	15.17	138.53
Median	0.700	2.800	49.600	59.50	107.50	14.44	66.67
Maximum	11.00	28.80	93.800	106.60	206.10	30.93	1000.0
Minimum	-7.30	-21.10	16.100	19.00	52.30	0.000	0.000
Std. Dev.	5.167	13.568	23.22	27.24	42.84	8.20	217.12
Skewness	0.338	0.075	0.152	0.129	0.360	0.029	2.94
Kurtosis	2.013	1.883	1.797	1.659	2.006	2.230	11.92

Correlation Matrix

Table: 3

Variables	ROA	ART	CR	DE	ITR	QR
ROA	1.000					
ART	0.297	1.000				
CR	0.990	0.352	1.000			
DE	0.996	0.304	0.988	1.000		

ITR	0.987	0.293	0.979	0.986	1.000	
QR	0.994	0.324	0.997	0.992	0.987	1.000

Regression for Model 1

Dependent Variable: ROA
Method: Least Squares
Table : 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-11.670	0.451	-25.899	0.000
ART	0.000	0.000	-1.423	0.160
CR	0.024	0.029	0.823	0.414
DE	0.068	0.014	4.896	0.000
ITR	0.042	0.047	0.874	0.386
QR	0.056	0.038	1.471	0.147

R-squared	0.995092	Mean dependent var	1.10308
Adjusted R-squared	0.994676	S.D. dependent var	5.16751
S.E. of regression	0.377067	Akaike info criterion	0.97498
Sum squared resid	8.388606	Schwarz criterion	1.17569
Log likelihood	-25.6868	Hannan-Quinn criter.	1.05417
F-statistic	2392.198	Durbin-Watson stat	0.79812
Prob(F-statistic)	0		

ROE Model

Dependent Variable: ROE
Method: Least Squares
Table : 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-25.870	0.648	-39.915	0.000
ART	0.001*	0.001	2.530	0.014
CR	0.027	0.049	0.556	0.580

DE	0.006	0.021	0.306	0.761
IRT	0.494***	0.086	5.740	0.000
QR	0.364***	0.070	5.218	0.000

R-squared	0.997114	Mean dependent var		2.846
Adjusted R-squared	0.99687	S.D. dependent var		13.57
S.E. of regression	0.759152	Akaike info criterion		2.375
Sum squared resid	34.00244	Schwarz criterion		2.575
Log likelihood	-71.1725	Hannan-Quinn criter.		2.454
F-statistic	4077.288	Durbin-Watson stat		1.067
Prob(F-statistic)	0			

Correlation Matrix

Table: 5

Variables	ROE	ART	CR	DE	IRT	QR
ROE	1.000	0.335	0.994	0.992	0.991	0.997
ART	0.335	1.000	0.352	0.304	0.293	0.325
CR	0.993	0.352	1.000	0.988	0.979	0.997
DE	0.991	0.303	0.987	1.000	0.986	0.992
IRT	0.991	0.293	0.979	0.986	1.000	0.987
QR	0.997	0.324	0.997	0.992	0.987	1.000

Results and Discussion

Model Summary of Return on Assets

The Statically analysis model summary shows that the return on asset is the dependent variable up to R square 99 % variation is explained by explanatory variables. The explanatory variables Current Ratio Quick Ratio Debt to Equity Ratio Account Receivable Inventory Turnover.

F Statistics

The regressions run on this model which shows the high significance the result. Because the F statistics is has significant p value. Therefore the model is best fit. The regression line is the minimum variance line.

Coefficients

The coefficient of data analysis shows the following results.

Current Ratio: It indicates that there is direct relationship between the Current Ratio and Return on Assets. But the relationship is in significant. The movement of the slop is positive direction which is 0.024. The result is significant because p value is greater than 5%.

Quick Ratio

It indicates that there is direct relationship between the quick Ratio and Return on Assets. But the relationship is insignificant. The movement of the slop is positive direction which is 0.056. The result is is significant because p value is greater than 5%.

Debt to Equity Ratio

It indicates that there is direct relationship between the Debt Equity ratio and Return on Assets. But the relationship is significant. The movement of the slop is positive direction which is 0.056. The result is is significant because p value is less than 5%.

When the company is highly leveraged it means it has a positive impact on return on assets.

Account Receivable Turnover (ART) Ratio

ART indicates that the slop of equation is the negative which is -.00046 that means there is a inverse relationship between the independent and dependent variables both are moving in the opposite direction. When there are increases in account receivable turnover it leads to increase on Return on Assets. Although the results are not significant.

Inventory Turnover Ratio

The results show that there is a direct relationship between the dependent and independent variables the slop is 0.0415 and the results are insignificant.

Correlation Matrix (table 3)

Table 3 shows the correlation among the entire variable. There is significant correlation between ROA and ART, CR DE ITR and QR. Because the value of correlation coefficient is greater than 0.5 as shown in table 3 there is significant positive correlation in above mention all the variables. It means when there is one unit change in ROA than ART, CR DE ITR and QR are also change but in same direction. Because the above variables are showing direct relationships.

Model 2 (Table 5)

The impact of working capital ratio Over Return on Equity

With the help of above formulas all variable are computed in the excel sheet than populated all variable in Eviews than with the help of plotting graph in Eviews to identify outliers and remove all abnormal outliers from the all variables data series which are also not justifiable by economics rational. So remove all outliers which are against economic theory than check heterokedasticty.

Detecting Heteroskedasticity

There are following five methods will be used to check where given data series are homoscedasticity are having presence of Heteroskedasticity.

The Breusch pagan LM Test
The Glesjer LM Test
The Harvey-Godfrey LM Test
The park Test
The White Test
The above mentioned LM test are run in Eviews and the result of LM=No. of observation X R square

The p value is insignificant which is greater than 5%. So it is concluded that the given data series does not report heterokedasticty and data are homokadasticst.

Detecting Autocorrelation

After detecting the heterokedasticty than check is there is any auto correlation of times series with its lags values. For this first of all we will used the Breush God fry serial Correlation LM test. It is found that the autocorrelation of first degree exist in the data because p value of Resid (-1) is significant. When again run this test by putting no. of lags = 2 than p value of resid (-2) become insignificant. Therefore first order auto correlation exists so Durbin Watson test is run for detecting autocorrelation. We regress the equation in Eviews as ROA as dependent variable and CR, QR, DE, IRT, ART as independent variables. Than observe the value of Durbin Watson state is 1.067. By using Durbin Watson State table to find out DL and DU. That is DL= 1.44 DU =1.77 at k=5(independent variable and n=65. Drawn the durbin Watson line our calculated value falls between 0 and 1.44. Therefore it concluded that positive autocorrelation is exist in the data and then method of HAC (neway-west) is used than the result that are free from autocorrelation are as follow as shown table 5 :

Model Summary of Return on equity table 5

The Statically analysis model summary shows that the return on equity is the dependent variable up to R square 99 % variation is explained by explanatory variables. The explanatory variables Current Ratio Quick Ratio Debt to Equity Ratio Account Receivable Inventory Turnover.

F Statistics

Table 4 the regressions run on this model which shows the high significance the result. Because the F statistics is has significant p value. Therefore the model is best fit. The regression line is the minimum variance line.

Coefficients

The coefficient of data analysis shows the following results.

Current Ratio: It indicates that there is direct relationship between the Current Ratio and **Return on equity**. But the relationship is in significant. The movement of the slop is positive direction which is **0.027**. The result is insignificant because p value is greater than 5%.

Quick Ratio

It indicates that there is direct relationship between the quick Ratio and **Return on equity**. But the relationship is significant. The movement of the slop is positive direction which is **0.363**. The result is insignificant because p value is less than 5%.

Debt to Equity Ratio

It indicates that there is direct relationship between the Debt Equity ratio and **Return on Assets**. But the relationship is insignificant. The movement of the slop is positive direction which is **0.0062**. The result is insignificant because p value is greater than 5%.

Account Receivable Turnover (ART) Ratio

ART indicates that the slop of equation is the positive which is **.0012** that means there is a direct relationship between the independent and dependent variables both are moving in the same direction. When there are increases in account receivable turnover it leads to increase on **Return on equity**. Results are significant because p value is less than 5%.

Inventory Turnover Ratio

The results show that there is a direct relationship between the dependent and independent variables the slop is **0.493** and results are significant because p value is less than 5%.

Correlation Matrix (table 5)

Table 3 shows the correlation among the entire variable. There is significant correlation between ROE and ART, CR DE ITR and QR. Because the value of correlation coefficient is greater than 0.5 as shown in table 3 there is significant positive correlation in above mention all the variables. It means when there is one unit change in ROE than ART, CR DE ITR and QR are also change but in same direction. Because above variables are showing direct relationships.

Conclusions and Recommendations

Working capital management and profitability of the company disclosed both negative and positive association. In Model 1 (Table 2) Out of the five ratios selected for the study three ratios, namely CR, QR, D/E, and IRT registered positive correlation with the selected profitability ratio, ROA. ART has negative correlation with ROA and CR, QR, ART and ITR have insignificant relationship with ROA. Only DE ratio has significant relationship with ROA. It means when DE increased it will put significant positive impact on profitability ratio (ROA).

In Model 2 (Table 4) five ratios selected for the study and all five ratio CR, QR, D/E, ITR and IRT registered positive correlation with the selected profitability ratio, ROE. But ART, ITR and QR has significant positive relationship with ROE and CR, and DE have insignificant relationship with ROE. It means when ART , ITR and QR are increased it will put significant positive impact on profitability ratio (ROE).

This study was conducted to check the relationship between working capital management and profitability. All the five hypotheses are partially proved by the data. Although from the literature review it is proved that working capital management has a positive relationship with the profitability.

It is suggested that further research should be conducted in this area with some different aspects of working capital management such as payables, cash conversion cycle and receivables which also are an essential part of the working capital management.

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The new thing in our research the idea is tested but we have studied on of richest manufacturing sector in Pakistan where there is high level of Working Capital is required to improve the business efficiency and profit margin also as well . In cement sector and other manufacturing sector there is the need of time to set all important parameters and must be determine the appropriate level of Working Capital is required

This study highlights the importance and effectiveness of the working capital practices in corporate sectors. Many studies have provided the solid documentary evidence that there is the position and negative significant relationship among the working capital and profitability of the company. We found the negative relationship between profitability measures of the firm and degree of the aggressiveness of the working capital. Investment and financing policy. This study should be predicted applied in the corporate sector.

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The mediating influence of Task conflict on the relationship between situational constraint and workplace bullying

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Abstract
Task conflict subsists contained through a group or team when there are divergences accompanied by means of the group associates regarding the tasks being executed. Yet even so situational manipulates may reason persons in the direction of obtain positive dissimilar conflict management strategies transversely time; work locations are time and yet again extremely resolute as well as relatively predictable. Workplace bullying, similar to infancy bullying, is the resemblance of entity otherwise groups just before utilize persistent in timid dating or in equitable activities alongside an associate or assistant. Workplace bullying preserve restrain such methods in oral, nonverbal, emotional physical mistreatment with disgrace. Situational constraints, as well as frequently well-known appearance of job stressor or else injures, had common sensible consciousness inside intensification environmental otherwise connected tools of the work place. Data were investigated since an outcome of calculate Multi-Collinarity Analysis of Variance (MANOVA) statistics, Factor Analysis, Post-hoc analysis, Mediation test, Sobel test, Factor Analysis, Correlation Matrix, the empirical evidence established so as to there is a positive significant relationship among workplace bullying along with situational constraint through task conflict by means of since mediator, situational constraint manipulates experience on the way to workplace bullying, the factor control time, work environment, job connected in sequence manipulate it. Task conflict partially mediates workplace bullying.

INTRODUCTION

The possible for conflict exists whenever and wherever people have get in touch with as people are organized into groups to look for a general goal, the probability of conflict to the highest degree increases. Since only the grimmest conflicts make headlines, conflict has a negative implication for many people. The entire conflicts are not the unchanged Task conflict is when team members convey differences of belief that narrate only to work tasks. Past research has exposed that task conflict may possibly sometimes be valuable and sometimes be negative to team recital When team members are not scared to exclaim and propose nonconforming opinions that confront the status quo. If people deem that they will be attacked for expressing unusual viewpoints, the environment is said to have low psychological wellbeing. In this case, the team could be in jeopardy of group feel, which is when disinclination to raise your voice leads to poor or appalling team decision making.

Workplace bullying, like childhood bullying, is the affinity of individuals or groups to use relentless hostile or unfair behavior beside a co-worker or subordinate. Workplace bullying can contain such procedure as verbal, nonverbal, psychological, physical abuse and humiliation. This type of aggression is mainly complicated because; dissimilar the emblematic forms of school bullying, workplace bullies frequently drive within the reputable regulations and policies of their organization and their society. Bullying in the workplace is in the greater part of gear reported as having been perpetrated by management and takes an extensive range of forms. Bullying can be concealed or over task conflict exists within a group or team when there are disagreements between the group members regarding the tasks being performed. Task conflict exists within a group or team when there are disagreements amid the group members about the tasks being performed. Even nevertheless situational influences may cause individuals to take up different conflict management strategies across time; work settings are time and again highly unwavering and quite conventional. Employees cooperate with the same co-workers, inducement structures do not change suddenly, employees do the identical kind of work for longer periods of time, and they mug the same (interpersonal) problems on a returning basis. The situational constraints theory presented by Peters, O'Connor, and Eulberg (1985) and Kane (1993) provided the theoretical framework for the study. While early work proved informative in considerate the relationship of situational constraints with many intrapersonal, or individual, constructs such as goal setting (Peters, Chassie, Lindholm, O'Conner & Kline, 1982).Socio cultural theory focuses on accepting the magnitude of situational factors in behavior faintly than individual distinction factors. Socio cultural theory places of interest the importance of the culture of the organization, When increased disappointment or stress caused by workplace factors result in employees intriguing frustrations out on others. Conflict management styles are select by individuals to match situations and diverge depending upon an individual's perceptions of disagreement, intervention, negative emotions, as well as the type of conflict.
According to Baron and Kenny (1986), a mediator is a variable that changes in relative to the independent and dependent variables. Mediation implies a causal progression along with three variables. A mediation model identifies and clarifies the apparatus that underlies an pragmatic relationship between an independent variable and a dependent variable passing through the insertion of a third explanatory variable, known as a mediator variable. According to Baron and Kenny (1986), Mediation is second-hand in the case of a strong relationship between the predictor and criterion variable. The independent variable is assumed to basis the mediator; these two variables should be connected. The occurrence of such a correlation results in multicollinearity, when the possessions of independent variable and mediator on the dependent variable are probable Multicollinearity is a statistical trend in which two or more predictor variables in a multiple regression model are vastly correlated. In this situation the coefficient estimates may change randomly in reaction to small changes in the model or the data. Multicollinearity does not condense the predictive influence or reliability of the model as a whole, at least within the sample data themselves; it only affects estimates a propos individual. That is, a multiple regression model with correlated predictors can indicate how well the complete pack of predictors predicts the outcome variable, but it may not provide valid results about any individual predictor, or about which predictors are unnecessary with respect to others, the assumptions basic regression analyses such as

ordinary least squares, the phrase "no multicollinearity" is every so often used to signify the nonexistence of fault less multicollinearity, which is an strict (non-stochastic) linear relation between the regresses.

Research Questions

1) Does situational constraint leads to exposure to workplace bullying?
2) Does situational constraint leads to task conflict?
3) Does situational constraint mediates the relationship between task conflict and exposure to workplace bullying?

Research Objectives

1) To determine high perceived situational constraint to exposure to workplace bullying.
2) To determine high perceived situational constraint leads to task conflict.
3) To determine task conflict positively correlates with exposure to workplace bullying.
4) To determine task conflict mediates the relationship between workload and workplace bullying.

Significance

In Pakistan scenario this is the first study conducted to provide an indulgent of the situational constraint between workplace bullying and task conflict used as a mediator. In this study provides occasion for positive approach to address any shortcoming. It provides an understanding of the situational constraint among workplace bullying and task conflict.

Literature Review

Bullying at work intended irritating, offending, socially exclusive of an important person or negatively upsetting someone's work tasks. In array for the tag bullying (or mobbing) to be useful to a scrupulous bustle, interface or process it had to occur repetitively and commonly and over a period of time. Bullying was getting higher process in the path of which the person confronted trimmings up in a mediocre position and becomes the target of systematic negative social acts. A conflict could not be called bullying if the incident was an isolated event or if two parties of approximately equal "strength" was in conflict. Bullying of workplace newcomers, or rite de passage bullying, comprises an old type of workplace bullying, known for centuries, especially occurring within shipping, military service, or several societies. In such cases, newcomers in the work place were met with unapproachable behavior. This conduct could be regarded as a cultural tradition, in which the new person was checked out and "tested".

The concept of workplace bullying refers to situations where an employee inside fatigable expose to negative and aggressive behaviors at work mainly of a psychological nature (Leymann, 1996), with the effect of mortifying, menacing, fearsome or tiring the target. Many of these single acts may be rather general in the workplace (Leymann, 1996) and, when happening in seclusion, may be seen as cipher of uncivil behavior or ‘‘impoliteness’’ at work (Lim & Cortina, 2005).When tirelessly directed towards the same individual over a longer period of time, they may revolve into an intense source of social stress (Zapf, 1999), proficient of causing relentless harm. Although the negative and discarded nature of the behavior complicated is important to the concept of bullying, the concept’s center characteristic is not the nature of the behaviors per se, but slightly the persistency of the experience (Einarsen et al., 2003).Buss (1961) argued that hostile behavior could be conceptualized beside three magnitudes: physical-verbal, active-passive, and direct-indirect.

Hence, bullying constitutes budding and frequently growing hostile workplace associations relatively than isolated and detached events and is allied with replication (frequency), gap (over a period of time) and patterning (of a variety of behaviors involved) as its most prominent features (Einarsen et al., 2003). An uncomplicated Work & Stress by difference exists between straight measures, such as accusations, verbal abuse and public embarrassment on the one hand, and indirect acts of hostility, such as rumors, gossiping and social isolation, on the other (O’Moore, Seigne, McGuire, & Smith, 1998). With situation to the workplace situation a supplementary difference has been made between work-related behaviors and person-related behaviors (Einarsen, 1999), obvious in an untimely Finnish study (Vartia, 1991) where smear, social seclusion and intimation about someone’s mental health may be seen as examples of person related bullying, even as giving a person too many, too few or too simple tasks, or tirelessly criticizing a person or their work, may be allied with work-related bullying.
While mainly apprehensive with negative behavior of a psychological nature, studies relating targets of bullying have discovered that physically menacing acts, and in some cases even physical brutality or the threat of violence, form part of a wider repertoire of aggressive acts applied in bullying cases (Leymann, 1990)..Bullying could have long-term academic, physical, and emotion consequences on bullies, their fatalities, and bystanders. The prevalence of bullying at schools had a negative impact on students’ prospect to be trained in a milieu that was safe and secure and where they were treated with respect (Shellard and Turner, 2004; Lumsden, 2002).

An endeavor to ignominy a coworker, the bully may buzz sabotage work, or criticize ideas (Lutgen-Sa). If workers could confirm they were targets of verbal operation sabotage, or threats, they may be proficient to salvage lost wages, medical expenses, and even castigatory reparation Furthermore sixteen additional states were proposing anti-bullying legislation (Cohen, 2010).Employees that witnesses their co-workers being abused capacity be terrified that they will be the next target of the bully. As a result, non-targeted co-workers also experience more stress in chaotic environments; actors may see their activities as maintaining control in situations where the actor has insufficient work control or high levels of work conflict (Einarsen et al., 1994). Individual responses suggest that accountability for bullying resides in the targeted individual, which simply was not the case. What were more, individual efforts to stop bullying was usually less than successful (Keashly, 2001; Lutgen-Sandvik, Alberts, & Tracy, 2008). Nonetheless, those targeted were keen to know what they could do to stop abuse. We argue a number of probable approaches targets may take, including how coworkers could help in these situations. Coworkers could be very helpful for supporting targets' stories and breaking the bullying cycle (Macintosh, 2006); concerted voice simply increases believability (Lutgen-Sandvik, 2006).

The situational constraints scale was measured a causal sign scale in which the items were not manifestations of a single basic assemble, but in its place were measured to compose a put up when united. In other words, the items were not similar forms of a single primary raise, nor did they imitate each other as was anticipated in a traditional effect sign scale (Spector& Jex, 1998, for further discussion).Situational constraints, an repeatedly famous form of job stressor or strains, had usual moderate awareness in explaining environmental, or related apparatus of the work place (Spector & O'Connell, 1994; Spector, Chen & O'Connell, 2000).Task conflict regards incompatibilities about the comfortable of tasks (Jehn, 1997; Jehn&Bendersky, 2003) On Individual level, task conflict could increase personal work attempt for instance. However, on individual level, penalty of task conflict were not only positive as this type of conflict also leads to more stress and apprehension (Jehn&Bendersky, 2003). Bullying can involve relentless supervisory abuse of subordinates (most common), coworkers "ganging up" on age group or, in rare occasions, "bullying up" when subordinates abuse a higher-level organizational member (Einarsen, Hoel, Zapf, & Cooper, 2003).

Bullying constitutes, and was constituted by, aggressive work environments (Liefooghe & MacKenzie-Davey, 2001; Salin, 2003) manifest by persistent fear and anxiety of workgroup members. Bullying was both an outcome of and a recursive reserve for hostile work environments (Lutgen-Sandvik & McDermott, 2008).Bullying at work was obvious by a difference in power between actors and targets (Einarsen et al., 2003) that exists preceding to the commencement of bullying (e.g., abusive supervision) or arises as a result of enduring harassment(peer-to-peer abuse) (Keashly & Nowell, 2003).Witnessing coworkers details augmented stress and objective to leave (Lutgen-Sandvik, et al., 2007; Vartia, 2001).

Task conflict typology was main in conflict literature, and many studies complete the task conflict frame (Amason, 1996; DeDreu, 2006; Olson et al., 2007; Pelled, Eisenhardt, & Xin, 1999).Literature on conflict studies the penalty of conflict at together individual and group levels of analysis. Jehn's (1995) framework, conflict was crack into task conflict refers to difference in viewpoints concerning a task. Examples of task conflict were disagreement between group members on work system and policy and resources ascription (De Dreu& Van Vianen, 2001). Cognition was the interior of task conflict; thus, it was also called cognitive conflict. This type of conflict was expected or was sometimes expectant in team work, as it focuses on assorted ideas on how best to attain common group goals (Amason, 1996).

To understand how task conflict involve a variety of team outcomes, a plentiful literature search was conducted on organizational conflict studies available after Jehn's (1995) worked (Dreu&Weingart, 2003) were also examined for probable sources. As a result of this search, in any case twenty three publications were originate, which listening carefully on task conflict, studies. Thirteen experiential studies examined the belongings of task conflict. Eight of the thirteen studies reported positive possessions of task conflict on team outcomes, whereas seven studies reported negative possessions only one study reported a non-significant effect of task conflict on team outcomes. In dissimilarity, task conflicts were disagreements between individuals about the comfortable of the task being performed, including differences in viewpoints, ideas, and opinions. The most commonly reported task conflicts anxiety sharing of resources, measures or course of action and interpretation of facts (Jehn, 1995, 1997).

Task conflict normally concerns one of two sets of issues: what was to be completed and how it was done (Barki & Hartwick 2004).Task conflicts were disagreements about the at ease of a task and work goals, such as allocation of resources, procedures, and understanding of facts (Jehn, 1995, 1997).Task conflicts embrace differences in viewpoints, ideas, and opinions, and may overlap with vigorous discussions and personal anticipation Task conflict had been related with numerous valuable effects, such as improving the use of debate within a team (Jehn, et al., 1999), which results inequality ideas and improvement (Amason, 1996; West & Anderson, 1996), and leads to better service deliverance (Tjosvold, Dann, & Wong, 1992).In distinction, task conflict had been related with quite a lot of useful effects, such as humanizing the quality of thoughts and innovation (Amason, 1996; West & Anderson, 1996),increasing beneficial debate (Jehn, et al., 1999), facilitating a more effective use of resources, and foremost to better service proviso (Tjosvold, et al., 1992). Jehn et al. (1999) found that task conflict mediates the positive effect of informational diversity on group performance.

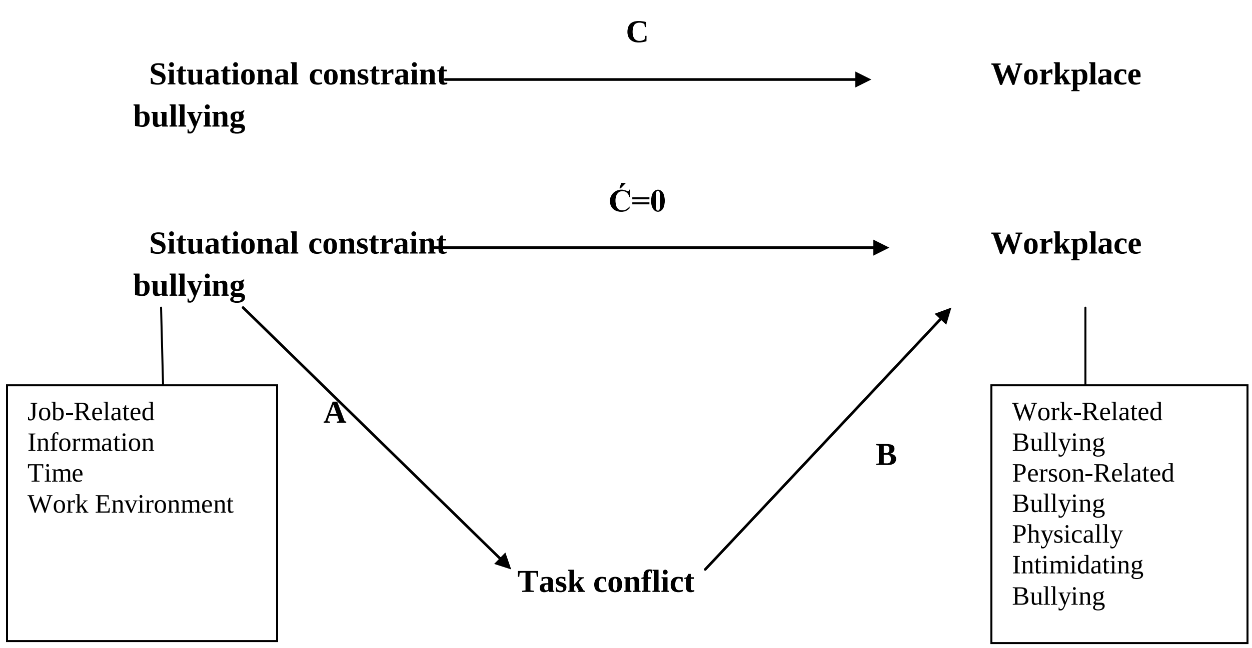
Jehn and Mannix (2001) examined in their longitudinal study that high-performing groups had a lofty task conflict in the middle phase of the group contact. Additionally; Amason (1996) found that task conflict was of assistance to team members' attitudes such as assurance and sentimental reception of team members. Argue that task conflict was dynamic was also confirmed in the management teaching field. Bradley (2012) task conflict leads to better team performance. This was because team members feel secure with discussing differing viewpoints and they understand that these opinions are severely connected to the work at hand. Under this situation, the team would produce more ideas and keep in healthy debate to turn up at the best solution. When psychological safety was low, team members might interpret any type of dissent as personal and threatening, even when it was task interconnected first, there was a lack of an integrated theoretical framework to present varied mediating processes between task conflict and different outcomes. A great deal of evidence shows that task conflict had multiple belongings on workplace bullying outcomes. However, there was a be short of studies, from a theoretical or empirical outlook to explore whether task conflict might had both functional and dysfunctional influences on workplace bullying through different mechanisms.

The theoretical conceptualization of the mediators between task conflict and outcomes requests to be reconsidered. Conflict scholars tend to borrow the rationale of the information processing perspective (IP) to explain how task conflict affects outcomes (Carnevale & Probst, 1998). Unfortunately, they had not empirically examined the mediators between conflict–outcomes association. Nurses who had less than pleasing relationships with their co-workers were more likely to leave their jobs (Lambert, Lambert & Ito, 2004; Thomas, 1992).In one study, quite a few nurses admitted they concentrated their hours of work because of conflict with coworkers (Warner, 2001).

Research Hypothesis

H1: There is significant relationship between situational constraint and workplace bullying.
H2: There is significant relationship between situational constraint and task conflict.
H3: Task conflict positively correlates with workplace bullying.
H4: Task conflict mediates the relationship between workload and workplace bullying.

Theoretical Frame Work



Methodology

Data Collection

Procedures

Data were collected from Power Tech, Huawei, Zte, Nokia Seimens, PTCL, lCC, Netkom, Supernet, Wateen, Wi- Tribe, Qubee companies through questionnaire**.** The employees filled in a hard copy of questionnaire the questionnaire mixed up of three demographic questions and additional included 5 Likert scales with around 31questions. These questions could be answered by specifying the liking on a, 5-, -point Likert-scale. The rationale last the long survey was that it sample size neglect

Sample

The method description from this point further on will always rise to these 625 respondents.49.3% of the respondents filled in the questionnaire, while 51.7% proficient the telecom. Also gender was almost equally dispersed with 54.6% male and 45.4% female respondents. While 100% of the employees work in companies, work in telecom service provider companies. The occupational sharing was as follows: 5.2% blue collar workers, 23% white collar workers, 8.6% private servants, 16% of the employees are positioned in middle management, 3.4% high level managers, and 43.6% of the respondents had other occupations. Other occupations are mainly made up from food employees, sales persons, and general employees. In this cross-sectional study, 625 employees of 12 different companies were addressed to fill in a hard copy survey in Rawalpindi, Islamabad cities. However, may possibly only use 625 observations in this study since 34 questionnaires were appropriate, as these respondents work in teams or work units. Situation constraint was preserved as a condition for studying task conflict as a mediator in this research

Measurement

Work-Place Bullying

Exposure to workplace bullying was measured by means of the S-NAQ as offered by Notelaers & Einarsen (2008). Nine items measured the exposure to negative acts at work. Respondents could answer on a 5-point Likert-scale categorized as “never”, “now and then”, “once a month” and “once a week or more”. Cronbach’s alpha for the S-NAQ was .86.

Task Conflict

Task conflict, in this research, focuses only on task conflict mediates the work place bullying since the negative acts that characterize bullying (jehn & Bendersky, 2003). To avoid these possible overlaps, Jehn’s (1995) task conflict scale is used. This scale consists of four items. The response potential categorized on a 5-point Likert-scale were “never”, “sometimes“, “now and then“, “often“ and “very often“. Cronbach’s alpha for the task conflict scale was .83.

Situation constrain

Situationnel Contraints Questionnaire (SCQ) (O’Connor, Peters, Pooyan et al, 1984; Freeman, 1996; Kane, 1997). Internal reliability for the measure is reported to range from .79 to .96, (Freeman, 1996; Kane, 1997). The SCQ consists of 24 items that measure each of the eight situational constraint factors. Participants are instructed to use a 5-point Likert-type scale to specify how well each statement corresponds to or describes their job setting or situations. The Likert-type scale assesses the precision of each statement ranging from 1 (not at all accurate) to 5(completely accurate). Scores are summed on each of the eight original Situational Constraints Questionnaire subscale factors.

Control variables

Age, gender and tenure are added as control variables. Particularly age and gender are widely used control variables in workplace bullying literature (Noterlaers et al., 2010; Raynor & Hoel, 1997; Vartia, 1996). For someone to be measured a fatality of workplace bullying he or she has to be exposed to negative acts at least once a week in the last six months (Leymann, 1996). Since the results of this study are therefore related to the time the employee works in the company, tenure is also controlled for.

Instrument

Survey research has been accompanied for half years by researchers via formats that incorporated questionnaires. Most often the data attains from a particular target group or a random sample of a precise population. Krathwohl (1997) renowned that survey research applications on the team spirit of participant answers, how and how much their answers change and are similar, and the reply of members established on their demographic variables. In addition to demographic facts invited, the accused will be tested to broad the Situational Constraints Questionnaire [SCQ] (O'Connor et al, 1984). The SCQ lies of 9 items that measure each of the three situational constraints. In this particular research, the Short Negative Acts Questionnaire after this stated to as S-NAQ) (Notelaers & Einarsen, 2008), the Task conflict scale (Jehn, 1995), and the workplace bullying scale were secondhand (Notelaers, De Witte, van Veldhoven, & Vermunt, 2007.

Participants are instructed to use a 5-point Likert-type scale to point out how well each statement corresponds to or defines their job location or situations. The Likert-type scale evaluates the correctness of each statement reaching from 1 (not at all accurate) to 5 (Completely accurate).

Data Analysis

Analysis strategies included calculation of frequency counts on the demographic data. These results described the respondents in the study .Response rates were also computed and a post hoc analysis was performed to ascertain any response/non-response bias in the data. Data were analyzed by computing Multicollinearity-Analysis of Variance (MANOVA) statistics, Factor Analysis, Post-hoc analysis, Mediation test, Sobel test.

The dependent variables were the three situational constraint factors from the SCQ. A separate analysis was performed for each of these dependent variables. The analysis allowed the researcher to examine mean scores and variance on the dependent variables. Because the independent variable consisted of three categories, post-hoc tests were proposed when a main effect was found. The results of these analyses determined what categories of the independent variable contribute to statistically significant differences in the dependent variable of constraints impacting their work.

Results and Findings

Descriptive statistics

A set of descriptive statistics coefficients that summarize a given set, which can either be a representation of the entire population or a sample. The measures used to describe the data set are measures of central tendency and measures of variability or dispersion. The frequency distribution of the return series is not normal. The skewness coefficient 0 and kurtosis >3, but the results show that.700 skewness andkurtosis-1.378, so its show that distribution is not normal. For a data set, the mean is the sum of values divided by the number of values. The mean is2.3360 often quoted along with the standard deviation 1.79718 the mean describes the central location of the data, and the standard deviation describes the spread. An alternative measure of dispersion is the mean deviation, equivalent to the average absolute deviation from the mean.

Table1Descriptive Statistics

Mean	**2.3360**	**3.3872**	**3.4032**	**3.4400**
S.Deviation	**1.79718**	**1.18504**	**1.18375**	**1.29375**
Minimum	**1.00**	**1.00**	**1.00**	**1.00**
Maximum	**5.00**	**5.00**	**5.00**	**5.00**
Skewness	**.700**	**-.031**	**-.030**	**-.132**
Kurtosis	**-1.37**	**-1.123**	**1.146**	**-1.369**

Table2Reliability Statistics

Cronbach's Alpha	**Cronbach's Alpha Based on Standardized items**
.939	**.937**

Cronbach's alpha average inter correlation among the items, so results show that workplace bullying, situation constraint, task conflict Cronbach's alpha .939.It's very good reliability statistics, the results show that variable highly correlated**.**

Table3
Regression

$Y_{WRB} = \alpha + \beta_{JRI} + \gamma_{WE} + \lambda_{TIME} + \mu_t$

Regression equation show that dependent variable work related bullying and independent variable job related information, work environment, time, and error term. The ANOVA result show that significance of the model, the last column sig shows (.000) the goodness of fit to the model, if "sig" is greater than.05, we conclude that our model could not fit the data and F. Statistics greater than 5.96, the F. Statistics result 90.691.The total Sum of Square 2015.440 is the total deviation in the dependent variable. The aim of the regression is to explain these deviations by the best β that can minimize the sum of squares of these deviations.

Table 3a ANOVA b

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1149.396	9	127.711	90.691	.000 a
Residual	866.044	615	1.406	-	-
Total	2015.440	624	-	-	-

Table 3b

Model Summary b

Model	R	R Square	Adjusted R Square	Std.Error of the Estimates
1	.755a	.570	.564	1.18668

R-Square measures the proportion of the variation in the dependent variable that explained by variation in the independent variables R-Square result show that 57% of the variation explained. The adjusted R-Square the proportion of the variance in the dependent variable that explained by variations in the independent variable, the result show that Adjusted R-Square 56.4% of the variance explained. Standard error of the estimate 1.18668measure the dispersion of the dependent variables estimates, if the standard error is more than 10% of the mean, its high.

Table 3c MANOVA

	Unstandardized Coefficients			
	β	t.value	sig	VIFStatistics
Constant	-1.521	-4.854	.000	-
JRI1	.223	4.957	.000	1.112
JRI	.189	4.458	.000	1.130
JRI	.621	15.703	.000	1.373

Time1	.003	3.05	.04	1.216
Time2	-.113	-2.181	.03	1.241
Time3	.119	2.599	.01	1.160
WE1	-.119	-2.774	.005	1.078
WE2	.073	2.634	.003	1.095
WE3	.378	9.049	.000	1.175

The coefficients provide information on the confidence with which we can support the estimate for each such estimate “T” and “Sig”. Our results significant with a 95% level of confidence. Simply put, the unstandardized β coefficient represents the effect of an independent variable on the dependent variable, net of the effects of the other independent variables, the 95% confidence for each beta estimate. A*t* value is any statistical hypothesis test in which the test statistic f. if the null hypothesis is supported. It is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data, the t-value statistic value >1.96.The coefficient results show that job related information positive significant relationship, time significant, insignificant relationship, work environment significant, insignificant relationship with workplace bullying. JRI 4.957, TIME 3.05,-2.181, WE-2.774, 2.634. Collinarity between variables is always present to resolve this problem Variance Inflation Factor analysis, VIF>10 high Collinarity in the data. The VIF results show that 1.112 very low so we can resolve the problem of Collinarity.

Table 3d

Co-linearity Diagnostic

Eigen Value	JR1	JR2	JR3	TIME1	TIME2	TIME3	WE1	WE2	WE3
9.075	.00	.00	.00	.00	.00	.00	.00	.00	.00
.229	.00	.00	.33	.04	.04	.00	.02	.00	.10
.151	.00	.04	.10	.00	.01	.11	.03	.01	.69
.120	.01	.36	.05	.00	.00	.15	.19	.03	.20

.105	.04	.00	.05	.03	.02	.01	.01	.86	.01
.096	.13	.48	.05	.03	.02	.34	.00	.03	.00
.084	.02	.06	.10	.02	.01	.36	.66	.03	.00
.072	.55	.03	.31	.07	.16	.00	.02	.00	.00
.047	.02	.01	.00	.66	.67	.00	.00	.00	.00
.020	.22	.01	.01	.16	.07	.03	.06	.04	.00

When a regressor is nearly a linear combination of other regressor in the model, the affected estimates are unstable and have high standard errors. This problem is called Collinarity or multicollinearity. It is a good idea to find out which variables are nearly collinear with which other variables. A commonly given rule of thumb is that VIFs of 10 or higher (or equivalently, tolerances of .10 or less) may be reason for concern. This is, however, just a rule of thumb; he gets concerned when the VIF is over 2.5 and the tolerance is under .40. The results show that Collinarity or multicollinearity resolve d. Eigenvalues 9.075 are a special set of scalars associated with a linear system of equations a matrix equation that are sometimes also known as characteristic roots, characteristic values. The determination of the Eigen values applications as stability analysis.

Table 4

Correlation

Sig 1-tailed	WRB1	JRI1	JRI2	JRI3	TIME1	TIME2	TIME3	WE1	WE2	WE3
WRB1	-	.000	.000	.000	.006	.008	.000	.259	.000	.000
JRI1	.000	-	.003	.000	.228	.189	.003	.374	.010	.000
JRI2	.000	.003	-	.000	.004	.000	.007	.126	.000	.000
JRI3	.006	.000	.000	-	.000	.000	.000	.252	.000	.000
TIME1	.008	.228	.004	.000	-	.000	.441	.002	.339	.323
TIME2	.000	.189	.000	.000	.000	-	.450	.002	.076	.028
TIME3	.259	.003	.007	.000	.441	.450	-	.000	.000	.000
WE1	.000	.374	.126	.252	.002	.002	.000	-	.001	.029
WE2	.000	.010	.000	.000	.339	.076	.000	.001	-	.000
WE3	.000	.000	.000	.000	.323	.028	.000	.029	.000	-

Correlation is computed into what is known as the correlation coefficient, which ranges between -1 and +1. Perfect positive correlation (a correlation co-efficient of +1) implies that as one security moves, either up or down, the other security will move in lockstep, in the same direction. Alternatively, perfect negative correlation means that if one security moves in either direction the security that is perfectly negatively correlated will move in the opposite direction. If the correlation is 0, the movements of the securities are said to have no correlation; they are completely random.

Table 5

Factor Analysis

Factor Transformation Matrix

Component	1	2	3	4	5
1	.817	.474	.274	.170	.013
2	.500	-.562	-.524	-.116	.088
3	-.127	.049	-.049	.456	.871
4	.094	-.393	.690	-.498	.333
5	.054	-.529	.348	.706	-.301

Factor Analysis measure variability among observed correlated variables, potentially lower unobserved variables called factor, linear combination plus error term. Principal components Analysis(PCA),linear combination of variable and maximum variance extracted from variables, it removes the variance seek second linear relationship,5likert scale use to check the response, component1 result .817, component2 result-.562, component3result -.049, component4 result .456, component5 result-.031.

Table 6

Post-Hoc Analysis

	Mean Difference	Sig	Lower bound	UpperBound
WRB	.20853	.031	-.6432	1.0603
PRB	.42850*	.029	-.8161	.5010
PIB	.12863	.018	-.1620	.4193

Post-hoc analysis if the mean difference between population significant, the analysis show that the WRB.03,PRB .02,PIB.01 significant

Partial Mediation

Coefficient situational constraint variable to the task conflict and task conflict to the workplace bullying and results significant this is called intervention mediation. We estimate Sobel test as below.

Regression

Table 6a

ANOVA b

Model 1	Sum of Squares	df	Mean Square	F	Sig.
Regression	1399.817	13	107.678	106.870	.000 a
Residual	615.623	611	1.008	-	-
Total	2015.440	624	-	-	-

The ANOVA result shows that significance of the model, the last column sig shows (.000) the goodness of fit to the model, if "sig" is greater than.05, we conclude that our model could not fit the data and F. Statistics greater than 5.96, the F. Statistics result 106.870**.**

Table 6

Model Summary b

Model	R	R Square	Adjusted R Square
1	.833a	.695	.688

R-Square measures the proportion of the variation in the dependent variable that explained by variation in the independent variables R-Square result show that 69.5% of the variation explained. The adjusted R-Square the proportion of the variance in the dependent variable that explained by variations in the independent variable, the result show that Adjusted R-Square 68.8% of the variance explained.

Table 6b

Coefficients a

Model 1		**Unstandardized Coefficients β**	**t**
	Constant	.943	2.801*
	JRI1	.191	5.000***
	JRI2	.107	2.941**
	JRI3	.360	9.644***
	TIME1	.013	.302
	TIME2	-.046	-1.048
	TIME3	.114	2.942**
	WE1	-.074	-2.014**
	WE2	.046	1.205
	WE3	.226	6.110***
	TC1	-.076	-1.911*
	TC2	-.064	-1.710
	TC3	.013	.311
	TC4	-.554	-15.149***

The coefficients provide information on the confidence with which we can support the estimate for each such estimate "T" and "Sig. Our results significant with a 95% level of confidence. Simply put, the un-standardized β coefficient represents the effect of an independent variable on the dependent variable, net of the effects of the other independent variables, the 95% confidence for each beta estimate. A *t* value is any statistical hypothesis test in which the test statistic F. The coefficient results show that mixed results with the help of this results we calculate Sobel test as below.

Table 7a
Sobel Test

	Input		Test Statistics	Std.Error	P.value
a	-1.521	Sobel Test	-2.42492033	.59148459	.000
b	.943	ArorianTest	-2.38725703	.60081633	.000
Sa	.313	Goodmantest	-2.46442441	.58200324	.000
Sb	.337				

Table 7b

	Input		Test Statistics	P.value
ta	-4.854	Sobel Test	2.42605268	.05526405
tb	2.801	Aroriant Test	2.38832829	.01692522
		Goodman Test	2.46562308	.01367752

Un-standardized coefficient value standard error of these path coefficient if the p-value=0 so first stage mediation also called intervention mediation, we completed first step than second step of mediation here z ≤± 1.96 then we go further next step is called full mediation but our result show that partial mediation because Sobel test value2.42, Aroriant test value2.38, Goodman test value2.46.The results values > z value so we cannot move further.

Limitation

Limitation in this study is the use of self-report surveys which creates the probable for familiar method variance or measurement bias. General method variance is related with the method of measuring variables that can drive up the relationship between variables and is apprehension when self-reports are used to measure both the independent and dependent variable. However, self-reports are required for the study of concepts such as perceptions of the Common method variance can occur for several reasons, respondents may try to maintain uniformity in their responses; answer in accordance to pre-existing theories about what the relationships between the variables under study should be strive to nearby themselves auspiciously and answer in accordance with the format of the items, rather than the comfortable. In this study the alteration of the task conflict scales. While the individual items were not changed but not used the relationship subscale of the measure was condensed with an item added from another subscale. Situational constraint has eight magnitude but we are used three dimension.

Conclusion and Recommendations

Task conflict was found to partial mediate the relationship between situational constraint and workplace bullying. This finding signifying that formerly investigated organizational predictors of workplace bullying does not always straight give to the occurrence of this phenomenon. In order to more carefully understand why bullying takes place and to avert impact on company costs and human-well being

Organizations must supporter for safe work environments, stricter laws and compulsory convention enforcing workplace practices. Organizations must establish and continue inclusive program for the avoidance of workplace bullying and management of all types of workplace. Managers need to create and keep up supportive work environments and help to subordinate to achieving the task, organizational policies are followed, and occurrence reporting is efficient and blame-free. Manager must include workplace bullying, situational constraint factor obstacle and conflict management in the prospectus and arrange professional employees in the preclusion assessment, and management of aggression in patients, visitors, and colleagues. When conflict arise Investigators should study upbeat obstacle and interference strategies, worth of training modalities, and worth of specific policies and task conflict to classify best practices for avoidance of workplace bulling. Manager supports a continual assurance to promotion a safe and healthy work environment

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Does Person- Organization Fit and Affective Organizational Commitment Relationship is Moderated by Personality Traits: Analysis of Extraversion and Emotional stability

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Abstract

Purpose __ The core objective of this study was to explore the relationship between person-organization fit and effective organizational commitment. In addition to examine moderating effect of Emotional stability and extraversion (Personality Traits), whether these strengthen or weaken the association of Person Organization fit and effective organizational commitment.

Design/Methodology __ Data was collected through structured questionnaires using Likert Scale which were distributed among a convenience sample of 230 employees of five large public organization of Pakistan. The data was analyzed using SPSS software.

Findings __ The results reveal that P-O fit has significant positive impact on effective organizational commitment. In addition, findings suggest that emotional stability and extraversion personality traits of employee do not moderate relationship between person organization fit and affective commitment significantly.

Research Limitations __ Sample size was small and data was collected only from public organizations. The future research needs to be conducted in private sector as well to make general applicability of proposed model in other organizations.

Practical Implications __ This study provides means by which organizations can develop schemes and evaluate the personality factors of existing employees which greatly enhance the effective organizational commitment.

Key words __ Employees, Person organization Fit, effective organizational commitment, extraversion, emotional stability, Personality traits

Introduction:

Person organization fit an integral part in selection process of organization and is defined as the compatibility and congruency between the values of individuals and organization. The similarity between characteristics of organization and individuals has a great impact on employees' attitude and job outcomes including organizational commitment, job satisfaction and employee retention. Ketchad and Strawser (2001) proposed that person organization fit is a key determinant of affective organizational commitment.

The person organization fit is based on social exchange theory defined as “Organizations supply financial, physical and psychological resources as well as the task related interpersonal and growth opportunities that are demanded by employees. Similarly organizations demand contributions from their employees in term of time, effort, commitment, knowledge, skills and abilities (Kristof, 1996, p.3).

A number of researchers have studied different types of Fit (Person supervisor Fit, Person Environment etc.) in relation to job outcomes like job satisfaction, affective commitment and turnover intensions. But in advancement and maintenance of affective commitment, Person- Organization Fit has been recognized as a potentially significant key factor (Mowday, Porter & Steers, 1982). Recent meta-analysis conducted by Kristof, Zimmerman and Johnson (2005) to test impact of Person Organization Fit on affective commitment provides strong supportive evidences of this relationship.

A little work done on personality traits, suggesting that they positively impact the relationship between Person-Organization Fit and Affective Commitment of employees. But limited research has been found enhancing the moderating impact of Big five personality traits of employees specifically emphasizing extraversion and emotional stability on person organization fit and Affective Commitment relationship. In previous studies researchers have used Big Five personality model to examine personality (Fields, 2002). Therefore the present study expands previous research by introducing big five personality for measurement of impact of employees’ personality traits on affective commitment. The big five personality model proposes five broad factors as personality measures which are emotional stability, extraversion, sociability, agreeableness, openness to experience. Valuable work has been done on the positive impact of personality on employees’ performance on job (Hurtz & Donovan, 2000) but little research found linking Big Five personality traits to organizational affective commitment. For this purpose the current piece of research focuses only on two factors; extraversion and emotional stability of big five personality model to measure employee personality and its impact on strengthening affective organizational commitment. Extroverts are identified as energetic, creative, talkative and social, whereas emotional stability is characterized by self confidence, feelings of calmness and cool. The reason for analyzing employees' personality in terms of extraversion and emotional stability is that these two traits are more critical and their high ratings develop best fit between person and supervisor. Earlier researchers showed that big five personality traits specifically emotional stability and extraversion have significant impact on affective commitment and person supervisor relationship and 25% of variation in supervisor leadership is due to personality (Smith & Canger, 2004).

Lack of person-organization fit poses great problems for the organization. Firstly, as human resource is key factor for the success of any organization, they must be provided with all the resources to work effectively. When organizations fail to provide organization fit, they are unable to attract and retain competitive and talented workforce. Secondly, competitors can take advantage of this situation by attracting these dissatisfied and unwilling employees by offering them better fit according to their personality. Finally, people perceive that they do not feel congruency of their values and individual characteristics; they not only go for other job opportunities but also make use of bad words of mouth about that organization. This significantly deteriorate the image and reputation of organization.

The present study provides future contribution to understand impact of person Organization Fit for affective commitment of employees to respective organization with the moderating effect of their personality traits (extraversion & emotional stability). The objective of current piece of research is to facilitate middle and top level management of public sector organization and institutes to increase affective commitment and loyalty of employees and university lecturers. This study could be beneficial for human resource managers for formulation and implementation of strategies regarding employees' personality traits and person- organization fit that increase level of performance of temporary and permanent staff. This ultimately leads to achievement of personal and professional goals like job satisfaction and emotional attachment to organization. Extraversion and emotional stability, employees' personality characteristics create great person-supervisor fit and person- organization fit which enable the employees to identify themselves with the goals and objectives of respective organization and accomplishment of affective commitment.

The purpose of this study is to build up and empirically test a model that throw light on the role of person-organization fit in developing employee affective commitment with in organization. This piece of research aims to extend the literature on person –organization fit, employee affective commitment, and personality traits (extraversion and emotional stability) by: (1) investigating the role of person-organization fit in predicting and enhancing employee affective commitment at workplace, and (2) simultaneously evaluating moderating role of personality traits particularly focusing on extraversion and emotional stability that either these strengthen or weaken the relationship between person-organization fit and affective commitment of employees.

The present study significantly contributes to theoretical body of knowledge by investigating the role of employees fit in the organization in predicting level of their affective commitment under the umbrella of theory of social exchange (Thibault and Kelley, 1952). According to this theory when employees receive physical and psychological resources from their organization, they feel themselves fit in the workplace environment. Thus in exchange to this employee think that they must pay to the organization in same way through commitment, and other extra role behaviors as person-organization fit fortify their need of belongingness. Secondly, this research has great importance for job seekers as job search criterion. Furthermore this knowledge can potentially increase the efficiency and productivity of business by improving working conditions and developing fit for employees in their respective organizations.

The proposal of the study is ordered into five chapters. The first chapter comprises the introduction; the second chapter is reviews the existing literature, discussing the relationship between variables; the third chapters forwards the theoretical framework and methodology of this research (including data collection techniques and analytical procedure) to test the hypotheses of the study and draw conclusion; fourth chapter focuses on analysis and results; and last chapter consists of discussion based on the findings along with implications of results, limitations, and future directions.

Literature Review

Person - Organization Fit:

The person organization fit is the compatibility of an employee with the working conditions, culture and values of respective organization (Kristof, 1996). According to

Holland (1973) congruence is obtain when an employee's personal characteristics are similar to working environment. The person organization fit is similarity of values between employees and organization in which he/she is working.

In previous research person organization fit was examined as congruence between employee's personality type and climate of working organization (Tom, 1971). Person organization fit has been analyzed as critical predictor of job satisfaction and organization commitment. According to Huang, cheng and chou (2005) person organization fit is a key factor which greatly influence the employee outcomes (work attitudes, turnover intentions, psychological behavior and work performance). Person organization fit could be a good predictor of extra effort and commitment to organization (Huang et al., 2005).

Person organization fit finds its fundamentals in social exchange theory in which exchange of resources and growth opportunities in return for commitment, significant contributions and retention takes place among employees and organizations. The expectation about mutual exchange can play significant role in employee's adjustability and compatability to organizational culture. (Kristof, 1996). Development of person organization fit can result in favorable individual attitude (such as job satisfaction, team work and affective commitment) and desirable employees' behaviors (such as increased on job performance and decreased turnover intentions).

Affective Organizational Commitment:

Organizational commitment is defined as "The relative strength of individual's identification with and involvement in a particular organization" (Mowday, Porter & Steers, 1982, p. 27). A psychological state that binds individuals to organizations is termed as organizational commitment (Allen & Mayer & Smith, 1993).

Organizational commitment is a multidimensional job outcome. It has three components which are Affective (employee's emotional attachment to, identification with and engagement in organizational goals and objectives), Continuance (an awareness about costs associated with loosing the organization) and Normative (a feeling of obligation to continue job in the respective organization). The present study focuses only on affective commitment of employees and its relationship with person organization fit. Affective commitment is psychological attachment and belongingness to an organization through development of feelings such as ownership, loyalty and high level of satisfaction. The bases of affective commitment are identity relevance, shared values and personal involvement.

It has been found in earlier researches that person organization fit makes employees strongly committed to respective organization. Meyer and Hoscovitch (2001) found that shared values of person and organization are solid bases for affective commitment. The relationship between affective commitment and person organization fit has been confirmed by empirical studies (Cable & Dekue, 2002; Van Vianen, 2000 & Wasti, 2003). Person organization fit enhances affective organizational commitment. Committed employees are likely to reinforce and strengthen the existing structure and values of an organization (Herndon et al., 2001). Boosting employees' response toward working environment of organization, results in enhanced affective commitment, which will ultimately lead to accomplishment of organizational goals.

In all, congruency between values and culture of organization and employees may in turn reinforce employee's affective commitment for their organizations. Therefore based on social exchange theory it is hypothesized:

H1. *Person organization fit strengthens employees' affective commitment towards the organization.*

The moderating role of Personality traits:

In past studies have been conducted on Big Five personality traits and their impact on job outcomes. But limited research has been found enhancing the moderating impact of Big five personality traits of employees specifically emphasizing extraversion and emotional stability on person organization fit and Affective Commitment relationship. In previous studies researchers have used Big Five personality model to examine personality (Fields, 2002). Big Five personality model is important to use for certain reasons like 1) It provides meaningful and critical categories of personality traits, 2) It is common framework which helps in research. Therefore the present study expands previous research by introducing big five personality for measurement of impact of employees' personality traits on affective commitment. The big five personality model proposes five broad factors as personality measures which are emotional stability, extraversion, sociability, agreeableness, openness to experience. Valuable work has been done on the positive impact of personality on employees' performance on job (Hurtz & Donovan, 2000) but little research found linking Big Five personality traits to organizational affective commitment. For this purpose the current piece of research focuses only on two factors; extraversion and emotional stability of big five personality model to measure employee personality and its impact on strengthening affective organizational commitment.

Extrovert persons are creative, talkative and social in their nature. They are identified by searching for excitement and therefore show great commitment toward social activities and groups. Such behaviors of extroverts may lead them to display commitment toward organizational work by organizing different type of meetings and sharing their ideas and knowledge through presentation of development projects.

Emotionally stable persons are characterized by cool, self confidence, calmness, having positive emotions and dealing great pressures with their strong personalities. Therefore employees with such personality trait demonstrate affective commitment toward organization.

Building on the notation that employee personality is key determinant of job outcomes and it strengthen the employees' affective organizational commitment, on the basis of personality trait theory and organizational support theory we hypothesized:

H2. *Personality will positively moderate the relationship between person- organization fit an affective commitment if employee is extrovert.*

H3. *Personality will positively moderate the relationship between person- organization fit an affective commitment if employee is emotionally stable.*

Theoretical Model of Study

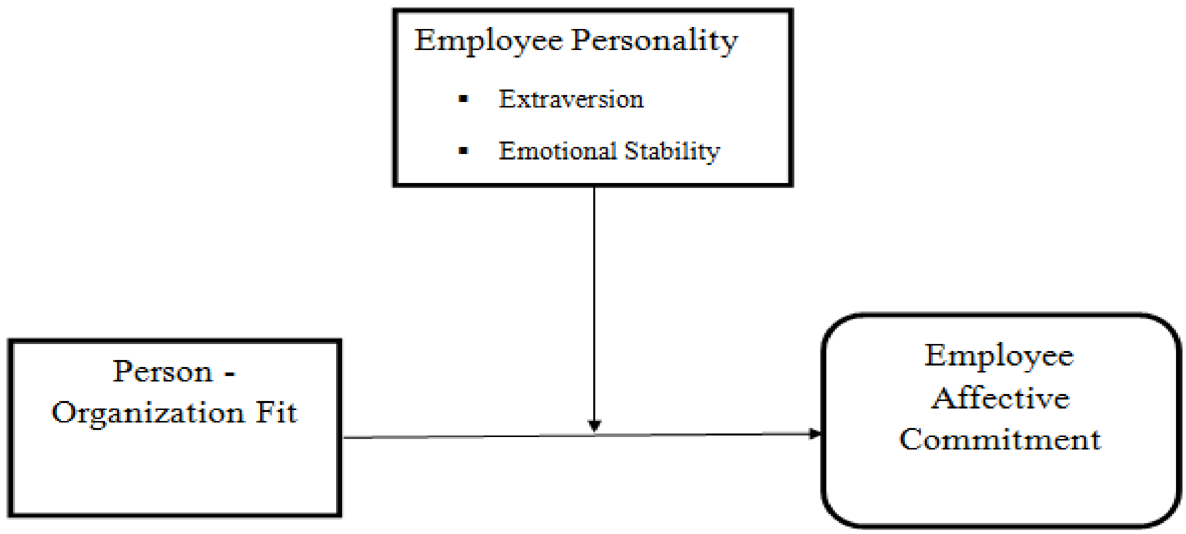

Figure 1: Moderating Role of Personality Traits (Extraversion and Emotional Stability) in the Relationship between Person-Organization Fit on Affective Organizational Commitment.

Consolidated form of Hypotheses:

H1. Person organization fit strengthens employees' affective commitment towards the organization.

H2. Personality will positively moderate the relationship between person- organization fit an affective commitment if employee is extrovert.

H3. Personality will positively moderate the relationship between person- organization fit an affective commitment if employee is emotionally stable.

METHOD

Research Design

A causal study was conducted to check impact of person organization fit on employees' organizational affective commitment with moderation of Big Five personality traits of employees. Variables were studied in field settings; not a single environmental aspect was controlled. Measurement of all variables in natural settings makes research interference minimal. Furthermore, unit of analysis was different organization working in Pakistan and the time horizon of research was cross-sectional i.e. data was collected only once.

Participants and Data collection

For current study, participants consist of full time employees of 5 large organizations operating in education (four companies) and service (one company) industries of Pakistan. Self-administered questionnaires were used to collect data. A total of 230 questionnaires were distributed among targeted participants to collect data on desired variables. 202 questionnaires were received back, out of which 190 were identified as usable for data analysis. The response rate was 82 percent. Sample size selected was considerable and provided sufficient data for analysis of results.

Total sample size consists of 52.9 % per cent males and 47.1 % per cent females having an average age lying between the ranges of 21 to 45 years. Information on questionnaires was gathered not only permanent employees but contractual employees as well to minimize the risk of correlation inflation due to common source bias (Podsakoff, Mackenzie & Podsakoff, 2003).

Measures

Person-organization fit, Respondents' congruence between their individual values, believes perceptions and culture of organization was assessed with 3- items scale (adapted version) created by Cable and DeRue (2002). Likert scale was used in administered questionnaire which consists of five responses for each item. (Ending points: 1 = Strongly Agree, 5 = Strongly Disagree). 0.852 was reliability value found for P-O fit scale for current set of data.

Organizational affective commitment, An 8-item scale was adopted to evaluate individuals' emotional belongingness to their respective organizations, which was developed by Mayer and Allen (1997). Each item was subjected to answer on a five point Likert scale ranging between 1 (strongly disagree) to 5 (strongly agree). The reliability of this scale was found to be 0.838.

Extraversion, Responses for extraversion were measured with 4- items scale (NEO-FFI; Costa & McCrae, 1992). Likert scale was used in administered questionnaire which consists of five responses for each item. (Ending points: 1 = Strongly Agree, 5 = Strongly Disagree). 0.687 was reliability value found for extraversion scale for current set of data.

Emotional Stability, Responses for emotional stability were measured with 5- items scale (NEO-FFI; Costa & McCrae, 1992). Likert scale was used in administered questionnaire which consists of five responses for each item. (Ending points: 1 = Strongly Agree, 5 = Strongly Disagree). 0.687 was reliability value found for emotional stability scale for current set of data.

Statistical Analysis

Pearson’s correlation analysis was used to analyze the relationship among Person-Organization fit, Organizational affective commitment and employees personality traits (extraversion & emotional stability. To test the research hypotheses and moderating effect of person supervisor fit, data on desired variable was entered into Hierarchical regression equation.

RESULTS

Demographical categorization table shows the gender distribution among career stage (three levels). 170 was the total number of respondents, out of which 52.9 % were males and 47.1 % were females. In sample size of 170, 26 males and 31 females belongs to junior level, 45 males and 40 females are from middle level and 19 males and 09 females belongs to senior level of career stage.

Table 2 shows descriptive statistics which includes mean, standard deviation and correlations for all central variables of study. All scales were satisfactory in their internal consistency. Results for correlations reflects that person organization fit is positively associated with employees affective organizational commitment ($r = 0.410$, $p = 0.01$). In addition both of personality traits that is extroversion ($r = 0.328$, $p = 0.01$) and emotional stability ($r = 0.242$, $p = 0.01$) are in positive association with employees affective organizational commitment. All correlations among central variables of study are highly significant at 1 %.

Values of standard deviation reflects that the variables of affective commitment (SD=0.73974), person organization fit (SD=0.88616), extroversion (SD=0.68757) and emotional stability (SD=0.73926) are almost equally deviated from their mean values. For all study variables hypotheses are in expected directions.

Table 3 displays the overall fitness of good for proposed model ($R^2 = 0.239$). The results show that there is a highly significant impact of person organization fit and personality on employee affective organizational commitment. Value of R^2 represents the variation in affective organizational commitment i.e. 23.9 % caused by person organization fit and employee personality traits (Extroversion & emotional stability) remaining all other variables constant. In addition table 3 also throw light on individual impact of person organization fit and personality traits on affective organizational commitment (DV). Betas are showing the rate of change caused by each predictor in dependent variable. Out of total variation, 32.9 % of affective organizational commitment is explained by person organization fit, 22.9 % by extroversion and emotional

Table 4 provides the assessment of the possible moderation caused by personality traits of employees which are extroversion (Ex) and emotional stability (Ems) in the relationship of person organization fit (POF) and employee affective organizational commitment (AC). Results of table 4 demonstrate that there is no significant moderation effect of employees' personality traits in this relationship. Although extroversion and emotional stability have individual significant impact on affective organizational commitment but when interaction terms of extroversion and emotional stability with person organization fit are introduced, it make the existing relationship insignificant. Comparing values of R^2 obtained in step 1 and step 2 clearly reflect that as there is no significant change and improvement in fitness of good of proposed model by introducing interaction terms of moderators with independent variable, therefore there is no moderation of personality in the relationship between person organization fit and affective organizational commitment. Value of R^2 change (0.003) is another sign of insignificant moderation. Negative values of betas for both interaction terms shows that extroversion (β = -0.164) and emotional stability (β = -0.283) are negatively impacting the employees' affective organizational commitment which is against the expected hypotheses of current study.

DISCUSSION

The main objective of current piece of study was to broaden the previous research on person organization fit and employees' affective organizational commitment in eastern context with moderation impact of employees' personality traits. Two traits from Big five personality traits model were targeted for current study which are extroversion (energetic, talkative and social) and emotional stability (tolerant, low in neuroticism, positive emotions).

The current study supported investigation of previous researchers on the impact of person organization fit on employees' organizational affective commitment significantly. Results showed that when person organization fit is analyzed as match of values, perceptions and believes, it is associated with organizational effective commitment. The present research added to previous studies and empirical evidences that higher the person organization fit, higher will be organizational affective commitment. The argument for this could be that when employees find match of their believes, perceptions and values with those of the organizations, they identified themselves with the goals and objectives of organization and start owning them which ultimately leads to organizational affective commitment. Current findings are in congruence with those of previous researchers such as Kristof-Brown (2000). Person organization fit is an important and valid determinant of organizational affective commitment for both temporary and regular employees. Findings of current piece of research, add value to prior empirical studies that congruence of values does matter for organizational affective commitment. Social exchange theory provides strong and fundamental evidence for significant relationship between person organization fit and organizational affective commitment.

The most important part of current study was to check moderating effect of employees' personality traits (extraversion & emotional stability) on the relationship of person organization fit and organizational affective commitment. It was hypothesized that extraversion and emotional stability will positively moderate the relationship and will more strengthen it. But results of present study did not provide support in expected directions. Regression analysis reflected hat people high in extraversion and emotional stability possess low organizational affective commitment. A supporting argument for these results could be that no doubt personality traits may enhanced organizational affective commitment, suggesting that an employee high in extraversion and emotional stability displays organizational affective commitment as compare to individuals low on these traits, when some other important factors LMX, empowerment and person environment fit are present. In absence of these factors, contributions of these personality characteristics are of no relevance. Person supervisor fit not only influence the employee effectiveness but also influence their attitudes. This implies that lower the person organization fit, lower will be LMX and ultimately lower would be organizational affective commitment regardless of extraversion and emotional stability.

Extroverts are identified with self-confidence, dominance, social and generating great enthusiasm, creative, wants to set their own objectives and apply their ideas. But unfortunately in our country individuals are not provided with authority and empowerment to achieve organizational goals by their own unique way. Rather they are given set pattern, which they have to follow. This is the main cultural difference among east and west, which makes extroverts as well as emotionally stable people low in organizational affective commitment and look for other jobs providing them career growth. Because extroverts show great commitment to their professions as compare to organization and its goals. This factor makes them high in continuance commitment as people stay in organization for economic benefits associated with job in return for their efforts.

LIMITATIONS

As far as limitations of present research are concerned, the first problem was that sample size was too small for obtaining precise results. Secondly self administered questionnaire was used to collect data on central variables of study. Thus results may have affected by common method variance. Common method variance is defined by Avolio, Yammarino and Bass (1991) as “the overlap in variance between two variables attributable to the type of measurement instrument used rather than due to a relationship between the underlying constructs” (p. 572).

Furthermore only Likert scale was used to record employee responses. This might have influence the results because respondents are confined to set options whereas they might have some what different opinion. Finally sample size was selected only from public sector. To make this study generalizeable and valid for all organizations, it must also be in private sector as well.

RESEARCH IMPLICATION AND FUTURE DIRECTIONS

Despite of certain limitations, the current piece of study's findings presents practical as well as theoretical level valuable and credible implications for organizations working in Pakistan regarding enhancement of organizational affective commitment by identifying its critical determinants like LMX, person environment and empowerment. Therefore organizations should establish strategies which put emphasis on LMX, personality and empowerment that can play the key role in organization's performance through increased commitment because these factors are basic sources of organizational affective commitment. In addition these results also provide organization with understanding that to what extent employees' personality traits influence o organizational affective commitment. Specifically, the present study points out that indeed extraversion and emotional stability are associated with organizational affective commitment.

Therefore motivating employees through empowerment and recognition would lead to show organizational affective commitment and put extra effort through organizational citizenship behavior, if employees are managed in effective way. Presence of respect, trust and partnership among supervisor and individual makes employees' empowerment successful, because only in this way supervisor will consider their ideas and enhance their self determination perception. In return organizational affective commitment by employees will get strengthen. Future research should be conducted to check combined effect of LMX, empowerment, person organization fit in presence of Big Five personality traits on organizational affective commitment to reconfirm the logic of current research. It is also required to analyze variables which can moderate proposed relationship of this research. For valid results and increased generalizability, sample size should be selected more than 500 for future research. Furthermore researchers must investigate the impact of Big Five personality traits on organizational affective commitment in cross cultures such as comparison of impact of personality on organizational affective commitment in east and west cultures.

CONCLUSION

This piece of research explored positive relationship among person organization fit and organizational affective commitment, which will be enhanced by employees' personality traits n presence of empowerment and LMX. The findings of this study have practical and theoretical implications and future directions which are valuable and credible for organizations and researchers as well.

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The Ranking and Comparison of Close-Ended Mutual Funds Performance with Open-Ended Mutual Funds: Evidence from Pakistan Mutual Funds Industry

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Abstract

The primary objective of this study is to rank and compare the performance of close and open-ended mutual funds in Pakistan. For this purpose the study ranked the close-ended mutual funds over the time period 2008 to 2012. By using Sharpe and Treynor measures, the 12 mutual funds have been ranked for five years. It has revealed that the Pakistani market is efficient as no fund performs better than the market in five years. A comparative study has also been conducted to compare the performances of open-ended and close-ended mutual funds. By using paired samples t-test the study finds no difference between the performance of open-ended and close-ended mutual funds performance. However, fund size and fund age are significantly different for open-ended and close-ended funds.

Key Words: *Mutual fund industry, performance comparison, open-ended mutual funds, close-ended mutual funds*

Introduction

The trend of investment in mutual funds is going up day by day. In developed countries' financial markets the increase in the number of mutual fund shows the preference of investors in this type of investment (Huhmann & Bhattacharyya, 2005). As define by Bogle (2004) Mutual Funds are managed by professionals who manage individual funds along with fund complexes. The purpose of establishing mutual fund is to facilitate small investors who have less investment and want diversified investment and who cannot invest in securities directly. For this reason the asset management company is effective to provide professional management as it has expertise in financial market (Afza & Rauf, 2009). According to Shah, Hijazi & Hamdani (2005) mutual funds are very useful for saving purpose as the savings are important for every individual to fulfill basic needs which are health, education and better living standard. In Pakistan, people have religious mind and they don't prefer to invest in interest base banking schemes. For such people there is an opportunity to save their capital by investing it in mutual funds and ultimately the money, they have stored in their pockets due to interest base banking schemes, will be mobilized for productive purpose.

Presently there are 130 open-ended and 14 close-ended mutual funds available in private sector (MUFAP, March 2013) and Securities and Exchange Commission of Pakistan (SECP) is the regulatory body of all types of mutual funds in Pakistan.

Open-Ended Mutual Funds

Open-Ended Mutual Funds are those funds which can be subscribed and redeemed on frequent basis. Open-ended mutual funds give the opportunity to the investors to withdraw their amount from fund at any specified time. The open-ended mutual funds have liquidity requirements as the large number of investors may redeem their units at a given day. Hence, the Asset Management Companies may need capitalization requirements. According to Rao (1996) open-ended mutual funds are the investment companies which remain ready every time to purchase their own shares at net asset value or its near price. As the price of share in open-ended fund varies with the proportion of net asset value therefore it directly affects the performance of fund. At the end of 2005, there were limited numbers of open-ended funds in Pakistan but now 130 open-ended mutual funds are listed in MUFAP (MUFAP, March 2013).

Close-Ended Mutual Funds

The close-ended funds are offered initially to public and then traded in the stock markets. Close-ended mutual funds are listed in MUFAP and traded in stock exchanges. This type of mutual fund has fixed capitalization of shares and investors have no option to withdraw their investment from fund. They can only trade in their shares in stock markets and can exchange their shares with other investors at any time during market hours. In close-ended mutual funds the redemption facility is not available therefore, the managers do not retain high cash for liquidity purpose. The price of share in close-ended mutual funds is settled by the valuation of the market and its price is affected by the demand and supply forces for that particular fund. The price can be different from the Net Asset Value (NAV). Usually the market price for these close-ended mutual funds is 10% to 20% higher or lower than the NAV.

Literature Review

Mutual fund is appearing as the great topic in these days researches. Mutual Funds industry is attaining great attention of the researchers as the trend of investment in mutual funds is growing day by day. So in order to facilitate the small investors and funds managers, many studies have been conducted on mutual funds in foreign countries and some studies have also been conducted in Pakistan.

Many researchers have conducted their studies on Mutual Funds with regard to Fund type. According to Anderson, Coleman, Frohich & Stegall (2001) close ended mutual funds are the funds which are different from ordinary funds as their shares traded on discounted prices in secondary market. They find that the returns of these type of funds relate to the country’s market index, exchange rate and the discount in selling price of funds.

Yi & Kim (2005) examine the risk factors and performance of close ended mutual funds by taking the data from 1993 to 1999 by taking the sample of 82 close-ended mutual funds they investigate the risk factors and returns. They take price and return from The Center for Research in Security Prices (CRSP) and portfolios return from Morning Star Mutual Funds. They document that the close-ended mutual funds have unique characteristics. They also document the risk factors are not identical in common stock and close-ended mutual funds. However, book-to-market ratio and size are equally important for both common stock and mutual funds.

Brown (1995) finds that returns of mutual funds are consecutively correlated over a period of time. He also pointed out that past performance of mutual funds is good predictor of performance in future of mutual funds.

Pontiff (1997) investigates the returns of close and open ended mutual funds and documents that the variance of return on close-ended mutual fund price is greater than the variance on return in net asset value. He also documents that the open ended mutual funds have no market price therefore share price of this type of funds are same as market value of investment.

Peterson, Pietranico, Riepe & Xu (2001) say that the funds can be affected by different factors. In their study they examine the factors which affect the funds. These factors include pre-tax performance which further includes risk, turnover and fund expense. The other factor is post tax performance which includes expenses, risk, past pre-tax performance, and past tax efficiency.

Glosten & Harris (1988) document that Mutual Funds, by their large trading volume and market positions, accomplish the trades more favorably. These large funds can also increase their research resources which lead them to create more investment opportunities. Filbeck & Tompkins (2004) conduct their study on fund performance by using data over the period 1999 to 2001 and document that the mature funds perform better than short term funds. However, Blake, Lehmann & Timmermann (1998) state that the funds perform better in their first year of existence. Most of these studies are conducted in foreign countries. There is a scope for conducting this kind of study in Pakistani mutual fund industry.

Methodology

The population of the study consists of all close and open-ended mutual funds listed in MUFAP. The data of the time period from January 2008 to December 2012 have been used for analysis. A total 13 close-ended mutual funds are listed in MUFAP. From the total of 13 mutual funds, 12 funds have been selected which are having their data publicly available in the data period from 2008 to 2012. To rank the performance of mutual funds the traditional measures like Treynor and Sharpe models are used. To compare the performance of open and close-ended funds paired samples t-test is used. For this purpose, Statistical Package for Social Sciences (SPSS) and MS Excel have been used.

Treynor Model

This model was introduced by Treynor in 1966 to measure the performance of portfolio by taking into account the factor of systematic risk. The current study has used this model to analyze the performances of all close-ended mutual funds. Treynor ratio has calculated for five years of data for every fund and compared the performance with market. The model is:

$$\text{Treynor Ratio} = \frac{(R_p - R_f)}{\beta}$$

Where:

R_p , Representing average return

R_f , Representing average risk free return

β , Systematic Risk

$$\beta = \frac{Cov_{im}}{\sigma m^2}$$

Sharpe Model

Sharpe introduced this model in 1966 to measure the performance of portfolios by taking into account the companies' specific risk / standard deviation. This study has employed this measure for analyzing mutual funds performance evaluation.

$$\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p} \quad X$$

Where:

R_p = observed average return of fund;

R_f = average risk free return;

σ_p = standard deviation of fund return.

Sharpe ratio has been calculated for five years of data of each fund and compared the performance of funds with market. In this study Sharpe ratio is reported in percentage values. A comparative analysis has also carried out to compare open-ended and close-ended mutual funds. This analysis is based on the comparison of fund size, fund age, turnover, expense ratio, ROA and ROE.

Results and Findings

The results of Treynor and Sharpe measures are as follows:

Table 1

Treynor and Sharpe Ratio for 2008

Sr. No.	Fund Name	Treynor Ratio	Ranking	Sharpe Ratio	Ranking
1	Atlas Fund of Funds	-0.742	7	-5.9767	3
2	Asian Stock Fund	-0.8371	10	-7.07432	10
3	Safeway Mutual Funds	-0.8703	11	-7.27362	11
4	JS Growth Fund	-0.6793	1	-1.67174	1
5	JS Value Fund Limited	-0.8121	8	-6.61779	9
6	Meezan Balanced Fund	-1.3015	12	-9.2887	12
7	PICIC Energy Fund	-0.7405	6	-6.16313	7
8	PICIC Growth Fund	-0.7146	4	-5.99121	4
9	PICIC Investment Fund	-0.7192	5	-6.1156	6
10	NAMCO Balanced Fund	-0.7011	3	-6.01411	5
11	First Capital Mutual Fund	-0.6812	2	-5.81199	2
12	Golden Arrow Selected Stock Fund	-0.8287	9	-6.55448	8
13	Market	-0.69333		-1.22245	

Table 1 shows Sharpe and Treynor ratio of each fund for the year 2008. The table shows that all the funds have negative Sharpe and Treynor ratios even the market has both its Treynor and Sharpe ratios negative. This can be associated to the start of financial crisis arround the world in the late of 2007. In 2008 Pakistani stock market remained freezed for a longer period of time therefore no trading took place and market went down. The table reveals that no fund outperformed the market even when the market itself has negative Treynor and Sharpe ratios. The fund at serial 4 i.e. JS Growth Fund perform better as compare to the other funds and the same ranking through Sharpe and Treynor ratio means that the fund is properly diversified. First Capital Mutual Fund is on second ranking but less performance than the market and it also has the same ranking in Sharpe and Treynor measures which indicates the proper diversificaiton of the fund. Likewise NAMCO Balanced Fund is at third in Treynor but at fifth in the Sharpe ratio. It means the fund is managing its systematic risk but unable to manage its unsystematic portfolio risk therefore the ranking is different in Sharpe and Treynor. Likewise, the table ranks all the other funds. The Meezan Balanced Fund is at last in ranking i.e. 12th number and the ranking in Sharpe and Trynor is same.

Table 2

Treynor and Sharpe Ratio for 2009

Sr. No.	Fund Name	Treynor Ratio	Ranking	Sharpe Ratio	Ranking
1	Atlas Fund of Funds	0.57291	7	6.266449	7
2	Asian Stock Fund	0.62928	3	8.694846	2
3	Safeway Mutual Funds	0.60832	5	8.267113	5
4	JS Growth Fund	0.57364	6	2.203073	11
5	JS Value Fund Limited	0.03755	12	0.431592	12
6	Meezan Balanced Fund	0.56201	8	5.534710	9
7	PICIC Energy Fund	1.06711	1	9.774832	1
8	PICIC Growth Fund	0.47502	10	5.978949	8
9	PICIC Investment Fund	0.51672	9	6.712850	6
10	NAMCO Balanced Fund	0.41915	11	5.156769	10
11	First Capital Mutual Fund	0.64379	2	8.540304	4
12	Golden Arrow Selected Stock Fund	0.62902	4	8.632312	3
13	Market	-0.49730		-1.055294	

Table 2 shows the ranking of all the funds through Sharpe and Treynor ratios for the year 2009. The table reveals that all the funds have their Sharpe and Treynor ratios positive which means that their performance remained better in 2009. It is shown in the table that the market has negative values of Sharpe and Treynor but the funds have positive value which means in 2009 all mutual funds outperformed the market. The table also ranks the funds and fund at serial 7 i.e. PICIC Energy Fund is on the first rank because both values are greater than the other funds' values. The same ranking in Sharpe and Treynor shows that the fund is properly diversified. First Capital Mutual Fund is second in Treynor ranking but at fourth in Sharpe ranking. It means the fund is not properly diversified therefore the systematic and unsystematic portfolio risk differs.

Table 3

Treynor and Sharpe Ratio for 2010

Sr. No.	Fund Name	Treynor Ratio	Ranking	Sharpe Ratio	Ranking
1	Atlas Fund of Funds	0.15957	1	2.225254	1
2	Asian Stock Fund	-0.14063	8	-2.222780	8
3	Safeway Mutual Funds	-0.17819	11	-2.566025	10
4	JS Growth Fund	-0.13774	7	-0.656863	5
5	JS Value Fund Limited	-0.12490	6	-2.059905	7
6	Meezan Balanced Fund	-0.02787	3	-0.418077	3
7	PICIC Energy Fund	0.03905	2	0.664589	2
8	PICIC Growth Fund	-0.03371	4	-0.610148	4
9	PICIC Investment Fund	-0.05999	5	-1.105575	6
10	NAMCO Balanced Fund	-0.19359	12	-3.239257	12
11	First Capital Mutual Fund	-0.14680	9	-2.643901	11
12	Golden Arrow Selected Stock Fund	-0.17032	10	-2.274010	9
13	Market	0.12402		2.307251	

Table 3 shows the Sharpe and Treynor ranking for each fund for the year 2010. The table reveals that all the funds, except Atlas Fund of Funds and PICIC Energy Fund, have their ratios negative which indicates their bad performance in 2010. All the funds have underperformed the market as the market has positive Sharpe and Treynor ratio. All funds have lower ratios than the market, except Atlas Fund of Funds' Treynor ratio. Other than market, the Atlas Fund of Funds is first in ranking and performed better as compare to other funds. The ranking of Atlas Fund of Funds in both Sharpe and Treynor is same which means the fund is properly diversified. Keeping in consideration the above results, it can be said that the stock market of Pakistan remained efficient in 2010 as no fund beat the market.

Table 4

Treynor and Sharpe Ratio for 2011

Sr. No.	Fund Name	Treynor Ratio	Ranking	Sharpe Ratio	Ranking
1	Atlas Fund of Funds	-0.53814	4	-3.676577	3
2	Asian Stock Fund	-0.53411	2	-7.874156	7
3	Safeway Mutual Funds	-0.53474	3	-0.534738	1
4	JS Growth Fund	-0.77812	7	-2.708146	2
5	JS Value Fund Limited	-0.59474	5	-8.219718	8
6	Meezan Balanced Fund	-3.81208	12	-5.991159	5
7	PICIC Energy Fund	-2.32483	11	-10.150959	9
8	PICIC Growth Fund	-0.84539	8	-11.134935	10
9	PICIC Investment Fund	-0.95125	9	-14.702741	12
10	NAMCO Balanced Fund	-0.61038	6	-7.575113	6
11	First Capital Mutual Fund	-0.37178	1	-5.389970	4
12	Golden Arrow Selected Stock Fund	-1.54134	10	-12.946976	11
13	Market	-0.21451		-4.63197	

Table 4 shows the ranking of all close-ended mutual funds through Treynor and Sharpe measures for the year 2011. Based on the above table it is revealed that all the funds have negative Treynor and Sharpe ratios including the market which means the performance of all funds remained poor in 2011. No fund has beaten the market even after the Market's negative ratios. As far as the ranking is concerned, First Capital Mutual Fund is first in ranking in Treynor ratio whereas it is on the fourth in Sharpe rankings. It means the fund is not properly diversified as the ratios of Sharpe and Treynor measures are different. Likewise, Asian Stock Fund is second in Treynor ranking but on seventh in Sharpe ratio which means the fund is also not properly diversified.

Table 5

Treynor and Sharpe Ratio for 2012

Sr. No.	Fund Name	Treynor Ratio	Ranking	Sharpe Ratio	Ranking
1	Atlas Fund of Funds	0.157949	6	3.350303	3
2	Asian Stock Fund	0.312718	2	3.982683	2
3	Safeway Mutual Funds	0.306236	3	0.306235	10
4	JS Growth Fund	0.259639	5	1.209528	6
5	JS Value Fund Limited	0.439519	1	3.07420	5
6	Meezan Balanced Fund	-0.063145	12	-0.760139	11
7	PICIC Energy Fund	0.121405	7	3.091096	4
8	PICIC Growth Fund	0.026832	10	0.575090	9
9	PICIC Investment Fund	0.031715	9	0.692195	8
10	NAMCO Balanced Fund	-0.045578	11	-1.152491	12
11	First Capital Mutual Fund	0.039885	8	1.059164	7
12	Golden Arrow Selected Stock Fund	0.294403	4	7.776318	1
13	Market	0.313719		10.96620	

Table 5 shows the ranking of all close-ended mutual funds through Sharpe and Treynor measures for the year 2012. The table reveals that most of the funds performed better in 2012. The Treynor and Sharpe ratio for market was 0.313719 and 10.96620, respectively. The table shows that only JS Value Fund Limited has high Treynor Ratio than the market otherwise no fund has its Treynor or Sharpe ratio higher than the market. So it can be said that only JS Value Fund Limited outperformed the market whereas all other funds underperformed the market. The table also reveals that the Treynor and Sharpe ratio are not same for JS Value Fund Limited which means the fund is not properly diversified. Likewise, Asian Stock Fund is on second ranking which has second highest Treynor and Sharpe ratio but less as compare to market. The ranking of Asian Stock in Treynor and Sharpe ratios are same which means that the fund is properly diversified. In 2012 only two funds i.e. Meezan Balanced Fund and NAMCO Balanced Fund have their Sharpe ratio negative. The negative Sharpe ratio means poor performance of the funds therefore it is easy to ascertain that these two funds have bad performance as compare to other funds.

Keeping into consideration the results of five years, it is revealed that the Pakistani stock market is reasonably efficient as individual funds could not beat the market on consistent basis even in the aftermath of financial crisis of 2007 coupled with the political instability in the country.

Comparative Analysis

Table 6 shows the pairs of open and close-ended funds by taking ROE, ROA, Expense Ratio, Turnover, Fund Size and Fund Age. The table shows that pair number 5 and 6 have significant difference at significance value of 0.01 which means that there is statistically significant difference between the fund size and fund age of open ended and close-ended. Other values are insignificant which means there is no difference in open and close-ended mutual funds with respect to ROE, ROA, Expense Ratio and Turnover.

Based on the results it can be concluded that close-ended mutual funds are significantly larger in size and older in life. Although, these funds are fewer in number but their average size is significantly bigger than open-ended mutual funds. This can be associated with the fact that, unlike the open-ended funds, investors of close-ended funds cannot redeem their investment therefore these funds keep on growing in size. Similarly, close-ended funds are significantly older in age as compared to their open-ended counterparts. The fact is that no new close-ended fund is established in the near past so keeping the average age of the existing funds high while on the other hand a large number of open-ended funds are established in the recent past which significantly decreased the average age of open-ended funds. But looking into the more important aspects of these funds for investors i.e. ROA, ROE and expense ratio, open-ended funds are better, though not statistically significant, than open-ended funds. Adding to it the advantage of liquidity offered by open-ended funds can explain the trend toward the open-ended funds in the recent past. No close-ended fund is established (rather close-ended funds decreased in number) in the last 8-10 years but a large number of open-ended funds are started as show by MUFAP data. In 2003 there were around 13 open-ended and 35 close-ended funds registered in MUFAP whereas as in the year 2012-13 the number for open-ended increased by 130 whereas the number of close-ended funds dropped down to only 14 (MUFAP, 2013).

Table 6

Paired Sample Test

	Paired Differences						
			Std. Error	95% Confidence Interval of the Difference			
	Mean	Std. Deviation	Mean	Lower	Upper	t	Sig. (2-tailed)
OpenROE – CloseROE	.033	.170	.054	-.088	.154	.62	.553
OpenROA – CloseROA	.033	.169	.053	-.088	.154	.62	.553
OpenExpense Ratio – CloseExpense Ratio	-.004	.013	.004	-.013	.006	-.87	.406
OpenTurnover – CloseTurnover	-.515	.747	.236	-1.049	.020	-2.18*	.057
OpenSize – CloseSize	-2.708	.283	.089	-2.910	-2.506	-30.28***	.000
OpenAge – CloseAge	-.2000	.039	.012	-.228	-.172	-16.39***	.000

* Significant at $p < 0.1$
**Significant at $p < 0.05$
***Significant at $p < 0.01$

Conclusion

This study has focused on the ranking of close-ended mutual funds over five years and a comparative analysis of open and close-ended funds characteristics. By using the Treynor and Sharpe measures it has been revealed that no fund outperformed the market on a consistent basis over the study period. It has also been revealed that Pakistani stock market is reasonably efficient as no fund could beat the market on regular basis even when the market was facing downfall problem. A comparative study has also conducted to compare open and close-ended mutual funds on different aspects. The results demonstrate that there is no difference in the performance of open and close-ended mutual funds over the study period. There is significant different in the two groups based on fund's age and size but these differences have their own reasons behind it. Lastly, this study explains the rationale behind the dramatic increase in the number and value of open-ended funds in Pakistan over the recent past.

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