

Volume 5 Number 2 July 2017  
Online ISSN 2307-7921  
Print ISSN 2070-0296

# JINNAH BUSINESS REVIEW

The Impact of Psychological Empowerment on Organizational Citizenship Behavior and Knowledge Sharing Behavior: The Mediating role of Employee Engagement and Moderating role of Leader-member exchange

Financial Stability of Islamic Banks: Evidence from selected Asian Countries

Effects of Social Media Brand Reviews on Trust and Brand Perception: An Experimental Study on Facebook in Pakistani context

Determinants of Facebook Usage in Organizations and its Impact on Job Performance

The Impact of Corporate Governance on the Financial Distress: Evidence from Pakistani Listed Companies

Impact of Procedural Justice on Organizational Commitment with Moderating Effect of Pay Satisfaction

Determinants of Trading Volume in Karachi Stock Market

The Effect of Emotional Intelligence on Turnover Intentions; The Role of Employee Well-being, Engagement and Perceived Organizational Support



ISSN 2070-0296

# JINNAH BUSINESS REVIEW

VOLUME: 5 NUMBER: 2

JULY 2017



**JINNAH BUSINESS RESEARCH CENTER**

**ISLAMABAD, PAKISTAN**

## EDITORIAL BOARD

Patron-in-Chief

Mian Amer Mahmood, Patron (C.U.S.T.)

Editor-in-Chief

Professor Dr. Sajid Bashir

### *Editorial Board*

Dr. Charles Martin	(Wichita State University Wichita, United State of America)
Dr. Bori Popesko	(Tomas Bata University in Zlin Mostni, Czech Republic)
Dr. Jose M. Merigo	(University of Barcelona, Spain)
Dr. Osman Khan	(University of East London, United Kingdom)
Dr. Raihan H. Khan	(University of New York Oswego, United States of America)
Dr. Valerie Earnshaw	(Harvard University, United States of America)
Dr. Zafar Moeen Nasir	(American University, United Arab Emirate)
Dr. Abdul Karim Khan	(UAE University, Dubai)
Dr. Hamayun Naeem	(ZABIST University, Dubai)
Dr. Zulfiqar Ali Shah	(Islamic International University, Islamabad, Pakistan)
Dr. Qaiser Abbas	(COMSATS University, Lahore, Pakistan)
Dr. M. Zafar Iqbal Jadoon	(University of Central Punjab Lahore, Pakistan)
Dr. Kamran Naqi	(Hamdard University Islamabad, Pakistan)
Dr. Kashif-ur-Rehman	(Iqra University Islamabad Campus, Pakistan)
Dr. Khurram Shahzad	(Riphah International University Rawalpindi, Pakistan)
Dr. Arshad Hassan	(Capital University of Science and Technology, Islamabad, Pakistan)

### *Editorial Team*

Mr. Amir Khan Khattak

Ms. Maria Mashkoo

Mr. Muhammad Bilal Saeed

Ms. Sana Farzand Ali

## Table of Contents

1	The Impact of Psychological Empowerment on Organizational Citizenship Behavior and Knowledge Sharing Behavior: The Mediating role of Employee Engagement and Moderating role of Leader-member exchange	1
2	Financial Stability of Islamic Banks: Evidence from selected Asian Countries	13
3	Effects of Social Media Brand Reviews on Trust and Brand Perception: An Experimental Study on Facebook in Pakistani context	22
4	Determinants of Facebook Usage in Organizations and its Impact on Job Performance	36
5	The Impact of Corporate Governance on the Financial Distress: Evidence from Pakistani Listed Companies	49
6	Impact of Procedural Justice on Organizational Commitment with Moderating Effect of Pay Satisfaction	54
7	Determinants of Trading Volume in Karachi Stock Market	61
8	The Effect of Emotional Intelligence on Turnover Intentions; The Role of Employee Well-being, Engagement and Perceived Organizational Support	69

# The Impact of Psychological Empowerment on Organizational Citizenship Behavior and Knowledge Sharing Behavior: The Mediating role of Employee Engagement and Moderating role of Leader-member exchange

Rizwana Kosar\*

Corvinus University, Budapest, Hungary

---

**Abstract.** The aim of this study is to determine the relationship between psychological empowerment and two behavioral outcomes of an employee (organizational citizenship behavior and knowledge sharing behavior) by examining the mediating role of employee engagement and moderating role of leader-member exchange. A survey was completed by 146 employees working in a variety of jobs and organizations. The data were collected by self-administered questionnaire and then analyzed by using correlation and regression analysis. Results indicate that psychological empowerment positively influences organizational citizenship behavior and knowledge sharing behavior. In addition, employee engagement partially mediates the relationship between psychological empowerment and organizational citizenship behavior and fully mediates between psychological empowerment and knowledge sharing behavior. Leader-member exchange does not moderate the relationship between psychological empowerment and employee engagement. Psychological empowerment has positive relationship with the employee engagement for employees low in leader-member exchange than for employees high in leader-member exchange. The implications of these findings are discussed.

---

## 1 Introduction

In recent years an extensive body of literature has focused on psychological empowerment of an employee. Researchers across the past several decades have analyzed behavioral consequences affected by psychological empowerment. (Conger and Kanungo, 1988) have focused on the positive effects of empowerment. On the basis of their structure of a range of cognitive motivation theories, they identified meaning, self determination, competence, and impact as the set of employee task assessments associated with intrinsic task motivation. Psychological empowerment is defined as intrinsic task motivation following a sense of control in relation to ones work and active orientation to ones work role that is evidenced in four dimensions: meaning, self-determination, competence and impact (Spreitzer, 1995).

The literature shows that perceived high performance managerial practices, socio-political support, leadership and work design characteristics are contextual antecedents of psychological empowerment (Seibert et al., 2011). Previous studies examined that organizational justice and psychological empowerment, positively and indirectly influence organizational citizenship behavior (Najafi and Khademi-Eslam, 2011) and traditionalism of middle manager had moderated

the relationship between psychological empowerment, performance and commitment (Akerib et al., 2014). In previous studies the mediating role of psychological empowerment has also been examined between expected contributions, individual characteristics, moral competence, transformational leadership and performance, commitment, OCB towards leaders and organizational commitment (Akerib et al., 2014; Seibert et al., 2011).

Compared to formal in role job performance, organizational citizenship behavior (OCB) is nontraditional job behavior (Özer et al., 2011). Organizational citizenship behavior (OCB) is defined as behavior related to work that is optional, not related to formal organizational reward system and promote the effective operations of organization collectively (Moorman, 1991). Organizations could not survive or prosper without their members behaving as good citizens by engaging in all sorts of positive behaviors (Clark and Jahangir, 2004). Knowledge Sharing Behavior (KSB) is a set of individual behaviors which involve sharing ones work related knowledge and skills with other members within ones organization, which can increase the organizations effectiveness (ÖZBEBEK and TOPLU, 2011); it is a team process in which team members are sharing ideas, information and suggestions related to task with each other (Srivastava et al., 2006).

---

\*Corresponding author.

Email: rizwanakosar2013@gmail.com

Engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Engagement is psychological presence when occupying and performing an organizational role (Bakker and Demerouti, 2008). The leader-member exchange (LMX) involves the inter-personal relationships between leaders and followers. In general, these dual exchanges are thought to range on a continuum from high to low (Fielding et al., 2005).

In previous studies researchers have examined perceived organizational support (POS), organizational commitment and job satisfaction as mediating variables between psychological empowerment, OCB and KSB (Najafi and Khademi-Eslam, 2011); whereas, leader member exchange was examined as moderator between employee engagement, organizational citizenship behavior and turnover intentions (Alfes et al., 2013). To my knowledge no published study to date has considered employee engagement as mediating variable linking psychological empowerment and organizational citizenship behavior and knowledge sharing behavior. Also, no study has examined leader-member exchange as moderator between psychological empowerment and employee engagement.

This study investigates the moderating role of leader member exchange in relationship between psychological empowerment and employee behaviors, including organizational citizenship behavior and knowledge sharing behavior with mediating role of employee engagement. The decision to include these outcomes (OCB and KSB) was predicted not only on their importance in the field of management but also in the field of applied psychology, organizational behavior and social psychology. The behaviors of employees greatly affect the smooth functioning of organization; therefore it is important to examine the factors impacting employees behaviors. These two dependant variables are not highly relevant to organization but also related to personality of an individual.

This study contributes to the research on psychological empowerment, organizational citizenship behavior and knowledge sharing behavior in two major ways. First the examination whether leader member exchange acts as critical moderator between psychological empowerment and employee engagement. Second the examination whether two behavioral outcomes (OCB and KSB) are influenced by psychological empowerment with mediating effect of employee engagement. It has importance in organizational context to study variables that have impact on behaviors of employees. This study has four objectives: first, to identify the relationship between psychological empowerment and organizational citizenship behavior; second, to identify the relationship between psychological empowerment and knowledge sharing behavior; third, to investigate the mediating role of employee engage-

ment between psychological empowerment and OCB and KSB; fourth, to investigate the moderating effect of leader member exchange on relationship of psychological empowerment and OCB and KSB.

The underpinning theory for this study is social exchange theory (SET) which was introduced in 1958 by the sociologist George Homans. Social exchange is defined as the exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons. SET states that social exchange comprises actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships (Cropanzano and Mitchell, 2005). Drawing on the social exchange theoretical perspective, this study proposed that high quality relationships depend upon the behaviors of employees that are affected by psychological empowerment. This study is about two behaviors of employees OCB and KSB. These two behaviors can affect the relationships between employees. Leader-member exchange can also be understood in terms of social exchange theory. According to the theory, the quality of the exchange relationship usually differs from one subordinate to another. High exchange relationships are developed with some subordinates, whereas lower exchange relationships are likely to be developed with other subordinates (Wayne et al., 1997).

## 2 Literature Review

### 2.1 Psychological Empowerment and Organizational Citizenship Behavior (OCB)

Psychological perspective on empowerment was first introduced by Conger and Kanungo (1988). Psychological empowerment is a critical concept and it has been discussed by several researchers in management and other fields with respect to its impact on the empowered individuals and relationship of individuals with each other (Solansky, 2014). Thomas and Velthouse (1990) defined psychological empowerment as intrinsic motivation manifested in four cognitions reflecting an individuals orientation to his or her work role. The four cognitions are meaning, competence, self-determination and impact (Spreitzer et al., 1997).

Meaning refers to a fit between the requirements of a work role and persons beliefs, values and behaviors (Spreitzer, 1996). Competence refers to self-efficacy related to work, a belief of an individual in his/her own capability to perform work related activities with skill (Gist, 1987). Self-determination is a sense of choice in initiating and regulating actions (Deci et al., 1989). Finally, impact is the degree to which strategic, bureaucratic, or operating outcomes at work are affected by an individual (Ashforth and Mael, 1989).

Organizational Citizenship Behavior refers to the

proactive cooperation and assistance among coworkers. OCB for an organization is behavior displayed by employees to make good for an organization (Chi-ang and Hsieh, 2012). Skarlicki and Latham (1996) found that training union leaders in organizational justice principles increased union members citizenship behavior directed at both the union as an organization (OCBO) and individual members of the union (OCBI). Intrinsic motivation can increase assistance and coordination among employees.

Team-level empowerment climate is positively related to individual-level feelings of empowerment, which, in turn, positively moderates the positive effect of LMX on OCB (Wu et al., 2011). Job affect was associated more strongly with OCB directed at individuals, whereas job cognitions correlated more strongly than did job affect with OCB directed at the organization (Lee and Allen, 2002). Job cognitions reflect psychological empowerment. Value-expression, social and career-related motives, organizational commitment and job satisfaction are predictors of OCB (?). Previous literature indicates that teachers perceptions of their level of empowerment are significantly related to their feelings of commitment to the organization and to the profession, and to their OCBs, while decision making, self-efficacy, and status are significant predictors of OCB (Ahmad et al., 2014; Bogler and Somech, 2004). Thus increase in psychological empowerment influences individual and team level feelings, which influences job satisfaction leading to increase in organizational citizenship behavior.

*H1: Psychological empowerment is positively associated with organizational citizenship behavior.*

## 2.2 Psychological Empowerment and Knowledge Sharing Behavior (KSB)

Knowledge sharing also called knowledge exchange (Cabrera et al., 2006) refers to the provision of task information and expertise to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures (Cum-mings, 2004; Dorsey, 2003). Knowledge sharing can occur via written connection or face-to-face communications through networking with other individuals, or documenting, organizing and capturing knowledge for others (Cum-mings, 2004; Dorsey, 2003).

Organizational knowledge capabilities have a positive association with knowledge sharing. Technical, structural, and human knowledge capabilities are significant for organizational knowledge sharing and the effects of implementing knowledge management on organizational knowledge capabilities and knowledge sharing are also significant (Dresselhaus et al., 2007). Job involvement, job satisfaction, psychological em-

powerment and OCB are independent and positively related to employees' knowledge sharing behavior (Teh and Sun, 2012).

The five areas of emphasis of knowledge sharing research are organizational context, interpersonal and team characteristics, cultural characteristics, individual characteristics and motivational factors (Wang and Noe, 2010). Employees knowledge acquisition and provision are highest when network centrality, autonomous motivation, and ability are all high (Reinholt et al., 2011). Literature on KSB shows that motivational factors such as reciprocal benefits, knowledge self-efficacy, and enjoyment in helping others are significantly associated with employee knowledge sharing attitudes and intentions (Bock et al., 2005; Frazer et al., 2007). Thus the success of knowledge management initiatives depends on knowledge sharing. Psychological empowerment improves an individual capability which improves knowledge sharing.

*H2: Psychological empowerment is positively associated with knowledge sharing behavior.*

## 2.3 The mediating role of Employee Engagement between Psychological Empowerment and Organizational Citizenship Behavior

Engagement at work was conceptualized by Kahn (1990). Employee engagement has become a generally used and a famous term (Robinson, 2004). Most often it has been defined as sentimental and intellectual commitment to the organization (Alberti et al., 2005; Hammer et al., 2006; Looi et al., 2004) or the amount of voluntary effort displayed by employees in their jobs (Frank, 2004). Perceived organizational support predicts both job and organization engagement; job characteristics predict job engagement; and procedural justice predicts organization engagement. In addition, job and organization engagement mediated the relationships between the antecedents of job satisfaction, organizational commitment, intentions to quit, and organizational citizenship behavior (Saks, 2006).

Job demands such as risks, hazards and complexity undermine employees health and positively relate to burnout and job resources such as knowledge, autonomy, and a supportive environment motivating employees and positively relating to engagement. Job demands were found to hinder an employee with a negative relationship to engagement and engagement motivated employees and was positively related to working safely (Nahrgang et al., 2011). Results of previous research show that psychological conditions such as meaningfulness, safety and availability have significant positive relationship with engagement (Avolio et al., 2004). There is a significant relationship be-

tween psychological empowerment, job insecurity and employee engagement. Affective job insecurity moderated the effect of psychological empowerment on employee engagement (Stander and Rothmann, 2010). The above discussion shows that when knowledge, self-efficacy, determination, and motivation will increase, job demands will decrease, job resources will increase and job insecurity will decrease which has a positive influence on employee engagement.

High levels of work engagement are when employees are involved with, committed to, enthusiastic, and passionate about their work (Macey and Schneider, 2008). Work engagement can be improved through adopting certain workplace behavioral health practices that address supervisory communication, job design, resource support, working conditions, corporate culture, and leadership style (Attridge, 2009). Researchers in organizational behavior have long been interested in exploring how employees perceptions of their leaders influence their work-related thoughts and behaviors. The results indicated a significant positive relation between charismatic leadership and work engagement, between work engagement and OCB, and between charismatic leadership and OCB. Results also indicate a full mediation of leaderships effects on OCB via work engagement (Babcock-Roberson and Strickland, 2010). The results of previous studies support for positive relationships between employee engagement and every component of OCB. The relationship was found to be strongest for the civic virtue component of OCB. However, no support was found for the hypothesized moderating effect of HRD practices between employee engagement and OCB (Rurkkhum and Bartlett, 2012). Engagement and job embeddedness are unique constructs and both are predictors of performance and intention to leave (Halbesleben and Wheeler, 2008). Engagement is also a predictor of performance (Aad et al., 2012), team support is strongest predictor of engagement (Xu & Thomas, 2011). With the improvement in job design, working conditions, culture, leadership style and team support, employee engagement also increases, which has positive impact on employee behaviors such as organizational citizenship behavior.

Employee engagement emerges from positive organizational behavior (Bakker and Demerouti, 2008). Due to the increased frequency of organizational changes, predicting employees voluntary involvement in the development of organizational practices and individual work is of particular importance in organizational psychology (Gabrielsson et al., 2012). Rurkkhum and Bartlett (2012) found that psychological empowerment has positive influence on employee engagement. According to social exchange perspective, employee engagement deals with involvement in job and work and reflects quality of social exchange (Cropanzano and Mitchell, 2005). Thus, the employee engagement stemming from psychological empowerment can be trans-

lated into organizational citizenship behavior.

*H3: Employee engagement mediates the relationship between psychological empowerment and organizational citizenship behavior.*

## 2.4 The mediating role of Employee Engagement between Psychological Empowerment and Knowledge Sharing Behavior

Knowledge sharing is potential source to a firms success in todays highly competitive environment (Grant, 1996). Employee knowledge sharing provides way for mutual learning (Huber, 1991), which in turn may improve organizational performance (Hansen, 2002). Organizational rewards have a negative effect on employees tacit knowledge sharing intentions but a positive influence on their explicit knowledge sharing intentions; whereas, reciprocity, enjoyment, and social capital contribute significantly positively to enhancing employees tacit and explicit knowledge sharing intentions (Hau et al., 2013).

There are psychological, organizational and system-related variables that may determine individual engagement in intra-organizational knowledge sharing (Cabrera et al., 2006). Knowledge sharing will be improved when employees will be highly engaged.

Self-efficacy, openness to experience, perceived support from colleagues and supervisors and, to a lesser extent, organizational commitment, job autonomy, perceptions about the availability and quality of knowledge management systems, and perceptions of rewards are determinants of individual engagement and significantly predict self-reports of participation in knowledge exchange (Cabrera et al., 2006). Some of these variables are involved in dimensions of psychological empowerment. Employees knowledge acquisition and provision are highest when network centrality, autonomous motivation, and ability are all high (Reinholt et al., 2011).

Past studies found that the enactment of positive behavioral outcomes, as a consequence of engagement, largely depends on the wider organizational climate (Alfes et al., 2013). Thus, when employees self efficacy, competence, autonomy and determination are high, employee will be highly involved in his or her job and it has positive impact on knowledge exchange behavior.

*H4: Employee engagement mediates the relationship between psychological empowerment and knowledge sharing behavior.*

## 2.5 The moderating role of leader member exchange between psychological empowerment and employee engagement

This study is about the moderating effect of leader member exchange on relationship between psychological empowerment and employee engagement in organizational settings and it can be defined as the interpersonal exchange relationships between the new role incumbent (member) and his immediate supervisor (leader) (Dienesch and Liden, 1986). This interpersonal exchange relationship determines, in large part, the type of role the subordinate will play within a particular unit. Leader-member exchanges can be understood in terms of social exchange theory. SET emphasizes that interdependent transactions have the potential to generate high-quality relationships (Wayne et al., 2002). According to leader-member exchange (LMX) theory (Dansereau et al., 1975), Graen and Schiemann (1978); Graen and Scandura (1987), supervisors treat their subordinates differently; leading to the development of relatively constant set that ranges from lower to higher quality exchanges (Dienesch and Liden, 1986; Duchon et al., 1986; Graen and Cashman, 1975; Graen and Uhl-Bien, 1995; Sherony and Green, 2002). In higher-quality exchanges, both supervisors and subordinates enjoy advantageous rewards. For instance, higher-quality exchange subordinates acquire favorable performance evaluations (Gerstner and Day, 1997) and satisfying positions (Wakabayashi et al., 1990). In return, supervisors receive committed, competent and highly engaged subordinates (Dansereau et al., 1975, 1978; Liden and Graen, 1980). LMX quality influenced follower reactions to the form of emotion regulation engaged in by supervisors (Fisk and Friesen, 2012). Drawing on the insights gained from research in the areas of employee engagement, OCB and turnover intentions, along with the premise of the social exchange theoretical perspec-

tive, subordinates in high quality exchanges are more likely to strengthen the relationship between psychological empowerment and employee engagement.

*H5: Leader-member exchange moderates the relationship between psychological empowerment and employee engagement such that the relationship is stronger for those who are higher in leader-member exchange.*

## 3 Theoretical Framework

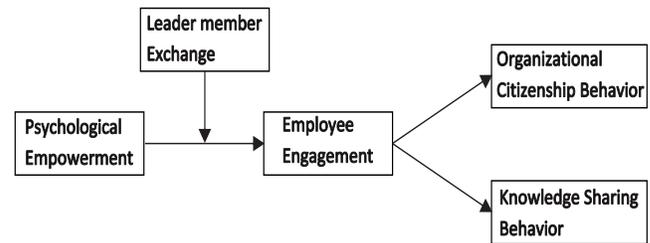


Figure 1: Theoretical Model

## 4 Methodology

### 4.1 Sample and Procedures

The sample consisted of employees working in three different work environments of Pakistan and it was a cross-sectional study. The research sites included well established organizations in the country which involved private sector banks, public sector bank and public and private sector universities and private organizations located in Pakistan.

The data were collected by self-administered questionnaire and copies were distributed to respondents

Table 1: ONE-WAY ANOVA

Control Variable	Employee Engagement		Organizational Citizenship Behavior		Knowledge Sharing Behavior	
	F- value	Sig(p)	F-value	Sig(p)	F-value	Sig(p)
Gender	0.13	0.72	1.34	0.25	0.01	0.94
Age	3.29	0.01	2.99	0.02	0.67	0.62
Qualification	0.13	0.97	1.2	0.31	0.16	0.96
Work Experience	2.55	0.03	0.77	0.57	1.31	0.27

If  $p > 0.05$ , no need to control that variable; If  $p < 0.05$ , control those variables.

Table 2: Mean, Standard Deviations, Correlations and Reliabilities

Variable	Mean	S.d.	1	2	3	4	5
1. PE	4.05	0.499	(0.82)				
2.EE	3.98	0.56	.55**	(0.88)			
3.LMX	5.25	1.16	.40**	.42**	(0.93)		
4.OCB	5.54	0.94	.37**	.33**	.49**	(0.896)	
5.KSB	5.64	1.13	.19*	.19*	.33**	.46**	(0.85)

*N=146; alpha reliabilities are given in parentheses;\*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ ; PE=Psychological Empowerment; EE=Employee Engagement; MX= Leader-member Exchange; OCB=Organizational Citizenship Behavior; SB=Knowledge Sharing Behavior.*

by hand and email. The target sample organizations were selected carefully for the study because in these sectors employees spend most of their time in offices from morning to evening so due to the stress of long working hours, employee engagement and their behaviors will be influenced. The convenience sampling technique was used because of limited resources and limited time availability. Initially total of 300 questionnaires were distributed, 156 were received back, and giving a response rate of 52%. The respondents are asked to identify their gender, age, qualification and work experience. After evaluating the questionnaires, it was found that 10 questionnaires were useless because of misleading and incomplete answers. So, the total size of responses being analyzed for statistical modeling was 146 ( $n=146$ ), which is 93.5% of total received questionnaires. The population sample for the research consists of 43.8% female and 56.2% male. The majority of the sample 56.8% holds master degrees while 19.9% people hold MS/M. Phil degrees. In terms of age group, a major portion of the sample 50.7% lies between 26 and 33 of age.

## 4.2 Measures

### 4.2.1 Psychological empowerment

A 12-item scale developed by Spreitzer (1995) was used to measure psychological empowerment. A sample item was The work I do is very important to me. The scale used for measurement was Likert, scale which is going from 1 (strongly disagree) to 5 (strongly agree). Cronbachs alpha for the scale was 0.82.

### 4.2.2 Employee engagement

A 17 item-scale developed by Maslach et al. (2001) was used to measure employee engagement. A sample item was I can continue working for very long periods of time. A five-point measure is going from 1 (strongly

disagree) to 5 (strongly agree). Cronbachs alpha for the scale was 0.88.

### 4.2.3 Leader-member exchange

An 11 item-scale developed by Liden and Maslyn (1998) was used to measure leader-member exchange. A sample item was I like my supervisor very much as a person. A seven-point measure is going from 1 (strongly disagree) to 7 (strongly agree). Cronbachs alpha for the scale was 0.93.

### 4.2.4 Organizational citizenship behavior

The aspects of organizational citizenship behavior (organizational citizenship behavior individual and organizational citizenship behavior organization) were measured by the instrument developed by Lee and Allen (2002). This instrument is comprised of 16 items. Example of these items consists of: Help others who have been absent, express loyalty towards the organization etc. A seven-point measure is going from 1 (never) to 7 (always). Cronbachs alpha for the scale was 0.896.

### 4.2.5 Knowledge sharing behavior

A 5 item scale developed by Zárrega and Bonache (2003) was used to measure knowledge sharing behavior. A sample item was My knowledge sharing with other organizational members is good. A seven-point measure is going from 1 (strongly disagree) to 7 (strongly agree). Cronbachs alpha for the scale was 0.85.

### 4.2.6 Control Variables

In table 1, one way analyses of variance were conducted to compare gender, age and work experience on employee engagement, organizational citizenship behavior and knowledge sharing behavior. These tests revealed that significant difference occurred in employee

engagement and organizational citizenship behavior on the basis of age and in employee engagement on the basis of work experience. Thus age and work experience had been controlled in regression analysis.

## 5 Results

### 5.1 Correlation Analyses

Table 2 presents descriptive statistics and correlations among the variables. All correlations at  $p < .05$  are significant. The mean for psychological empowerment was 4.05 (s.d=.499), and that for organizational citizenship behavior was 5.54 (.94). The correlation between the psychological empowerment and organizational citizenship behavior was .37. The mean for knowledge sharing behavior was 5.64 (s.d=1.13). The correlation between psychological empowerment and knowledge sharing behavior was .19.

### 5.2 Regression Analyses

Hierarchical regression modeling (HRM) was employed to test hypotheses (Table 3). In regressions where dependent variable was employee engagement, age and work experience were entered as control variables in first step and the regressions where dependent variable was organizational citizenship behavior age was entered as control variable in first step. To test the mediating role of employee engagement, Baron and Kennys (1986) procedures were applied. The results in Table 3 indicate that psychological empowerment has significantly positive influence on organizational citizenship behavior ( $\beta = .70$ ,  $p < .001$ ), supporting hypothesis 1. The psychological empowerment has significantly positive influence on knowledge sharing behavior ( $\beta = .44$ ,  $p < .05$ ), supporting hypothesis 2. After introducing the mediator (i.e. employee engagement) into model, psychological empowerment has significant positive influence on employee engagement ( $\beta = .60$ ,  $p < .001$ ), employee engagement has the significantly positive influence on organizational citizenship behavior ( $\beta = .58$ ,  $p < .001$ ), while influence of psychological empowerment on organizational citizenship behavior with mediating role of employee engagement becomes significant ( $\beta = .50$ ,  $p < .001$ ).

Therefore employee engagement partially mediates the relationship between psychological empowerment and organizational citizenship behavior, partially supporting hypothesis 3. Employee engagement has significant positive influence on knowledge sharing behavior ( $\beta = .60$ ,  $p < .001$ ). The influence of psychological empowerment on knowledge sharing behavior with mediating role employee engagement was insignificant ( $\beta = .29$ ,  $p < .05$ ), therefore employee engagement fully mediates the relationship between psychological em-

powerment and knowledge sharing behavior, supporting hypothesis 4.

Table 3 shows that interaction of psychological empowerment and leader-member exchange have insignificant influence on employee engagement ( $\beta = .09$ ,  $p < .05$ ), which indicates that positive relationship between psychological empowerment and employee engagement is weaker when the employees are high than low in leader member exchange, not supporting hypothesis 5.

## 6 Discussion and Conclusion

The first hypothesis predicted that psychological empowerment will be positively related to organizational citizenship behavior which was supported after analyzing results. Previous studies indicated that psychological empowerment was positively affected by organizational citizenship behavior (Chiang and Hsieh, 2012). The current study also affirms that psychological empowerment is significantly positively related to organizational citizenship behavior. The reason is that when employees will be psychologically empowered and motivated, they will be highly satisfied and committed towards their job, then cooperation with other organizational members will be increased and individual will give time freely to other members, organization or cause.

The second hypothesis predicted that psychological empowerment will be positively related to knowledge sharing behavior which was supported after analysis of psychological empowerment and knowledge sharing behavior. Employees knowledge acquisition and sharing are highest when network centrality, autonomous motivation, and ability are high (Foss, 2011). The more commitment towards meaningfulness, self-efficacy, autonomy and impact towards job positively influences the behavior of employee for knowledge sharing. The employee feeling of psychological satisfaction will put a positive impact on member of an organization.

The third hypothesis predicted that employee engagement mediates the relationship between psychological empowerment and organizational citizenship behavior which was partially supported after analysis. Psychological conditions positively influence employee engagement (Avolio et al., 2004; Kahn, 1990). The previous results indicated a significant positive relation between charismatic leadership and work engagement, between work engagement and organizational citizenship behavior. Employee engagement at work partially relates psychological empowerment with organizational citizenship behavior.

Analyses suggested a mediating role of employee engagement in the link between psychological empowerment and knowledge sharing behavior. The fourth

Table 3: Results of Regression Analyses

Predictors	EE			OCB			KSB		
	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
Step 1									
Control variables		0.35			0.004				
Step 2									
PE	.60***	0.32	.29***	.70***	0.14	.14***	.44*	0.04	
Step 1									
Control variables					0.004				
Step 2									
EE				.58***	0.12	.12***	.38*	0.035	
<b>Mediation: EE</b>									
Step 1									
Control Variables					0.004				
Step 2									
EE				.58***	0.12	.12***	.38*	0.04	
Step 3									
PE				.50***	0.17	.05*	.29ns	0.05	.01ns
<b>Moderation: LMX</b>									
Step 1									
Control variables		0.04							
Step 2									
PE	.51***	0.36	.33***						
LMX	.11*								
Step 3									
PELMX	.09ns	0.37	.01ns						

*N=146; control variables were age and work experience;\*\*\* $p$ .001; \*\* $p$ .01; \* $p$ .05; PE=Psychological Empowerment; EE=Employee Engagement; LMX= Leader-member Exchange; OCB=Organizational Citizenship Behavior; KSB=Knowledge Sharing Behavior.*

hypothesis stated employee engagement mediates the relationship between psychological empowerment and knowledge sharing behavior. The behavior of employee towards knowledge sharing and exchange will be positive when employee will be more empowered and engaged in work.

The fifth hypothesis indicated that leader-member exchange moderates the relationship between psychological empowerment and employee engagement such that the relationship is stronger for those who are higher in leader-member exchange. Results were not supporting this hypothesis.

According to vertical dyadic linkage theory, nature of interaction of leader with members is varying in in-group and out-group (Graen and Cashman, 1975). The relationship between leader and member is dyadic in nature. The outcome will vary for in-group and out-

group. In in-group members are more satisfied and committed and in out-group members are dissatisfied and not committed which puts impact on organizational performance (Graen and Uhl-Bien, 1995). The results of the study indicated that leader-member exchange does not moderate the relationship between psychological empowerment and employee engagement, because the psychological empowerment and employee engagement relationship of members of out-group will be weaker when leader-member exchange will be high.

## 6.1 Implications for Managers

Findings of this research have practical implications for the management because employee behaviors play an important role in the smooth functioning of an

organization. If employee is not intrinsically motivated to perform his/her task, it can create serious problem and conflict in an organization and he/she will show deviant behavior on workplace. Changes in employees behavior can be costly problem, both financially for organizations and psychologically for their employees. The understanding of psychological empowerment influence on organizational citizenship behavior and knowledge sharing behavior may help companies define solutions to reduce both financial and psychological costs of deviant behavior. If employees will not be psychologically empowered they will not share knowledge with other organizational members as well as they will not cooperate with other organizational members.

It is recommended that managers should increase psychological empowerment of employees. To increase the meaningfulness, competence, self-determination and impact of employees towards job, managers should adapt following steps: First identify what motivates employees such as opportunities for growth, control over their work, participation in decisions, to be part of a team, and sense of achievement that comes from being part of a successful team. Second identify and address barriers to employee motivation such as lack of knowledge, and fear of losing job. Third develop an employee motivation program such as provide encouragement, praise, and recognition as the employee's work improves. Make it clear that the employee's value in the workplace is increasing. Fourth, add motivation to employee training. Fifth implement procedures for motivating an aging workforce. Managers should provide good supervision to guide and direct activities of employees.

## 6.2 Limitations

The major strength of this study is field data from employees in a variety of organizations. Field data from different private and public organizations give some confidence in the generality of results, although this study inevitably has limitations. First, convenience sampling technique was used. Second the possibility of method bias for variables tapped from same source can create an issue. Third, the sample size was small.

## 6.3 Directions for Future Research

On the basis of limitations future researchers should use large sample size and experimental and longitudinal research designs. Researchers should test mediation moderation model in different countries or cultures with samples from other occupations and settings. Future research should examine relationship between job demands and job resources with organizational citizenship behavior and knowledge sharing behavior. Job crafting, burnout should be examined as

independent variables with organizational citizenship behavior. Job resources, transformational leadership, perceived organizational support and PS fit should be examined as moderators. Future research should also examine employee creativity as mediator between psychological empowerment and organizational citizenship behavior and knowledge sharing behavior.

## References

- Aad, G., Abajyan, T., Abbott, B., Abdallah, J., Khalek, S. A., Abdelalim, A., Abdinov, O., Aben, R., Abi, B., Abolins, M., et al. (2012). Observation of a new particle in the search for the standard model higgs boson with the atlas detector at the lhc. *Physics Letters B*, 716(1):1–29.
- Ahmad, M., Rajapaksha, A. U., Lim, J. E., Zhang, M., Bolan, N., Mohan, D., Vithanage, M., Lee, S. S., and Ok, Y. S. (2014). Biochar as a sorbent for contaminant management in soil and water: a review. *Chemosphere*, 99:19–33.
- Akerib, D., Araujo, H., Bai, X., Bailey, A., Balajthy, J., Bedikian, S., Bernard, E., Bernstein, A., Bolozdynya, A., Bradley, A., et al. (2014). First results from the lux dark matter experiment at the sanford underground research facility. *Physical Review Letters*, 112(9):091303.
- Alberti, K. G. M., Zimmet, P., and Shaw, J. (2005). The metabolic syndrome—a new worldwide definition. *The Lancet*, 366(9491):1059.
- Alfes, K., Shantz, A., Truss, C., and Soane, E. (2013). The link between perceived human resource management practices, engagement and employee behaviour: a moderated mediation model. *The international journal of human resource management*, 24(2):330–351.
- Ashforth, B. E. and Mael, F. (1989). Social identity theory and the organization. *Academy of management review*, 14(1):20–39.
- Attridge, M. (2009). Measuring and managing employee work engagement: A review of the research and business literature. *Journal of Workplace Behavioral Health*, 24(4):383–398.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., and May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The leadership quarterly*, 15(6):801–823.
- Babcock-Roberson, M. E. and Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of psychology*, 144(3):313–326.
- Bakker, A. B. and Demerouti, E. (2008). Towards a model of work engagement. *Career development international*, 13(3):209–223.

- Bock, G.-W., Zmud, R. W., Kim, Y.-G., and Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS quarterly*, pages 87–111.
- Bogler, R. and Somech, A. (2004). Influence of teacher empowerment on teachers organizational commitment, professional commitment and organizational citizenship behavior in schools. *Teaching and teacher education*, 20(3):277–289.
- Cabrera, A., Collins, W. C., and Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management*, 17(2):245–264.
- Chiang, C.-F. and Hsieh, T.-S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior. *International Journal of Hospitality Management*, 31(1):180–190.
- Clark, R. D. and Jahangir, A. (2004). Lateral lithiation reactions promoted by heteroatomic substituents. *Organic Reactions*.
- Conger, J. A. and Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of management review*, 13(3):471–482.
- Cropanzano, R. and Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, 31(6):874–900.
- Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management science*, 50(3):352–364.
- Dansereau, F., Graen, G., and Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational behavior and human performance*, 13(1):46–78.
- Dansereau, F., Graen, G., and Haga, W. J. (1978). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational behavior and human performance*, 13(1):46–78.
- Deci, E. L., Connell, J. P., and Ryan, R. M. (1989). Self-determination in a work organization. *Journal of applied psychology*, 74(4):580.
- Dienesch, R. M. and Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of management review*, 11(3):618–634.
- Dorsey, D. W. (2003). Hiring for knowledge-based competition. *Managing knowledge for sustained competitive advantage: Designing strategies for effective human resource management*, 21:155.
- Dresselhaus, M. S., Chen, G., Tang, M. Y., Yang, R., Lee, H., Wang, D., Ren, Z., Fleurial, J.-P., and Gogna, P. (2007). New directions for low-dimensional thermoelectric materials. *Advanced Materials*, 19(8):1043–1053.
- Duchon, D., Green, S. G., and Taber, T. D. (1986). Vertical dyad linkage: A longitudinal assessment of antecedents, measures, and consequences. *Journal of applied psychology*, 71(1):56.
- Fielding, R. et al. (2005). T. berners-lee.
- Fisk, G. M. and Friesen, J. P. (2012). Perceptions of leader emotion regulation and lmx as predictors of followers' job satisfaction and organizational citizenship behaviors. *The Leadership Quarterly*, 23(1):1–12.
- Foss, N. J. (2011). Knowledge governance: Meaning, nature, origins, and implications.
- Frank, F. C. (2004). Liquid crystals on the theory of liquid crystals. In *Crystals That Flow: Classic Papers from the History of Liquid Crystals*, pages 389–399. CRC Press.
- Frazer, K. A., Ballinger, D. G., Cox, D. R., Hinds, D. A., Stuve, L. L., Gibbs, R. A., Belmont, J. W., Boudreau, A., Hardenbol, P., Leal, S. M., et al. (2007). A second generation human haplotype map of over 3.1 million snps. *Nature*, 449(7164):851–861.
- Gabrielsson, P., Gabrielsson, M., and Seppälä, T. (2012). Marketing strategies for foreign expansion of companies originating in small and open economies: the consequences of strategic fit and performance. *Journal of International Marketing*, 20(2):25–48.
- Gerstner, C. R. and Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues.
- Gist, M. E. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of management review*, 12(3):472–485.
- Graen, G. and Cashman, J. F. (1975). A role-making model of leadership in formal organizations: A developmental approach. *Leadership frontiers*, 143:165.
- Graen, G. and Schiemann, W. (1978). Leader-member agreement: A vertical dyad linkage approach. *Journal of Applied psychology*, 63(2):206.
- Graen, G. B. and Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in organizational behavior*.
- Graen, G. B. and Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (lmx) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The leadership quarterly*, 6(2):219–247.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, 17(S2):109–122.

- Halbesleben, J. R. and Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22(3):242–256.
- Hammer, S. M., Saag, M. S., Schechter, M., Montaner, J. S., Schooley, R. T., Jacobsen, D. M., Thompson, M. A., Carpenter, C. C., Fischl, M. A., Gazzard, B. G., et al. (2006). Treatment for adult hiv infection: 2006 recommendations of the international aids society–usa panel. *Jama*, 296(7):827–843.
- Hansen, M. T. (2002). Knowledge networks: Explaining effective knowledge sharing in multiunit companies. *Organization science*, 13(3):232–248.
- Hau, Y. S., Kim, B., Lee, H., and Kim, Y.-G. (2013). The effects of individual motivations and social capital on employees tacit and explicit knowledge sharing intentions. *International Journal of Information Management*, 33(2):356–366.
- Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization science*, 2(1):88–115.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4):692–724.
- Lee, K. and Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of applied psychology*, 87(1):131.
- Liden, R. C. and Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of management Journal*, 23(3):451–465.
- Liden, R. C. and Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of management*, 24(1):43–72.
- Looi, P. W., Marusz, T., and Baumruk, R. (2004). What makes a best employer. *Insights and findings from Hewitts global best employers study*. Hewitt Associates LLC, New York.
- Macey, W. H. and Schneider, B. (2008). The meaning of employee engagement. *Industrial and organizational Psychology*, 1(1):3–30.
- Maslach, C., Schaufeli, W. B., and Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1):397–422.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of applied psychology*, 76(6):845.
- Nahrgang, J. D., Morgeson, F. P., and Hofmann, D. A. (2011). Safety at work: a meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes.
- Najafi, A. and Khademi-Eslam, H. (2011). Lignocellulosic filler/recycled hdpe composites: Effect of filler type on physical and flexural properties. *BioResources*, 6(3):2411–2424.
- ÖZBEBEK, A. and TOPLU, E. K. (2011). Does culture matter for corporate governance? a case study of turkey.
- Özer, Ö., Zheng, Y., and Chen, K.-Y. (2011). Trust in forecast information sharing. *Management Science*, 57(6):1111–1137.
- Reinholt, M., Pedersen, T., and Foss, N. J. (2011). Why a central network position isn't enough: The role of motivation and ability for knowledge sharing in employee networks. *Academy of Management Journal*, 54(6):1277–1297.
- Robinson, W. I. (2004). Global crisis and latin america. *Bulletin of Latin American Research*, 23(2):135–153.
- Rurkkhum, S. and Bartlett, K. R. (2012). The relationship between employee engagement and organizational citizenship behaviour in thailand. *Human Resource Development International*, 15(2):157–174.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*, 21(7):600–619.
- Schaufeli, W. B., Salanova, M., González-Romá, V., and Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness studies*, 3(1):71–92.
- Seibert, S. E., Wang, G., and Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review.
- Sherony, K. M. and Green, S. G. (2002). Coworker exchange: relationships between coworkers, leader-member exchange, and work attitudes. *Journal of Applied Psychology*, 87(3):542.
- Skarlicki, D. P. and Latham, G. P. (1996). Increasing citizenship behavior within a labor union: A test of organizational justice theory. *Journal of Applied Psychology*, 81(2):161.
- Solansky, S. (2014). Education and experience impact leadership development psychological empowerment. *Leadership & Organization Development Journal*, 35(7):637–648.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal*, 38(5):1442–1465.
- Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of management journal*, 39(2):483–504.
- Spreitzer, G. M., Kizilos, M. A., and Nason, S. W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. *Journal of management*, 23(5):679–704.
- Srivastava, A., Bartol, K. M., and Locke, E. A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. *Academy of management journal*, 49(6):1239–1251.
- Stander, M. W. and Rothmann, S. (2010). Psychological empowerment, job insecurity and employee engagement. *SA Journal of Industrial Psychology*, 36(1):1–8.

- Teh, P.-L. and Sun, H. (2012). Knowledge sharing, job attitudes and organisational citizenship behaviour. *Industrial Management & Data Systems*, 112(1):64–82.
- Thomas, K. W. and Velthouse, B. A. (1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Academy of management review*, 15(4):666–681.
- Wakabayashi, M., Graen, G., and Uhl-Bien, M. (1990). The generalizability of the hidden investment hypothesis in leading Japanese corporations. *Human Relations*, 43(11):1099–1116.
- Wang, S. and Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2):115–131.
- Wayne, S. J., Shore, L. M., Bommer, W. H., and Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of applied psychology*, 87(3):590.
- Wayne, S. J., Shore, L. M., and Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management journal*, 40(1):82–111.
- Wu, X., Zhou, T., Zhu, J., Zhang, B., Georgiev, I., Wang, C., Chen, X., Longo, N. S., Louder, M., McKee, K., et al. (2011). Focused evolution of HIV-1 neutralizing antibodies revealed by structures and deep sequencing. *Science*, 333(6049):1593–1602.
- Zárraga, C. and Bonache, J. (2003). Assessing the team environment for knowledge sharing: an empirical analysis. *International Journal of Human Resource Management*, 14(7):1227–1245.

# Financial Stability of Islamic Banks: Evidence from selected Asian Countries

Muhammad Ali<sup>1\*</sup>, Muhammad Hanif Akhtar<sup>2</sup>, Zahid Abbas<sup>2</sup>

<sup>1</sup>Riphah School of Leadership, Islamabad, Pakistan

<sup>2</sup>Bahauddin Zakariya University, Multan, Pakistan

---

**Abstract.** This paper is concerned with exploring financial strength of Islamic banks in Pakistan, Bangladesh, United Arab Emirates and Saudi Arabia on the bases of bank size. Using panel regression technique the paper also made a comparison between financial strength of Middle Eastern, as well as South Asian Islamic Banks and figured that on the bases of cost to income, loan to assets and some control variables, Middle Eastern Banks are financially stronger as compared to their South Asian counterparts. The study is pioneer in analyzing the issue on inter country level.

---

## 1 Introduction

Intense competition, consolidation of banks, globalization, liberalization, and continuous innovations with an aim to provide Islamic friendly suitable financial services, have boosted the interest of all the concerned individuals and groups in critical evaluation of Islamic banks. Whether they are investors, depositors, regulators, bank managers, performance evaluation of the banks stand as vital for all related parties. In a greatly competitive financial market, bank performance provides signal to depositor and investors, whether to invest or withdraw funds from the bank. Depositors may also be interested in evaluating performance of banks as they are not entitled to fixed returns and nominal values of their deposits are not guaranteed. Managers are keen to know the outcomes of previous management decisions as well as to evaluate whether to improve loan service, deposit service or both in order to enhance its finance. Being responsible for safety and the soundness of the banking system and preserving public confidence, bank regulators monitor banks' performance to identify banks experiencing severe problems. Persistent monitoring of performance and financial stability is important as existing problems may remain unnoticed and can lead to financial failure in the future otherwise (Hassan and Bashir, 2003; Samad and Hassan, 1999).

Existing literature on Islamic banking unleashes various studies conducted on performance measurement of Islamic banks (Bashir, 2001; Hassan and Bashir, 2003; Samad and Hassan, 1999; Sufian, 2007). However, although studies on assessing financial performance of Islamic and conventional banks in different countries

have been captured by existing literature on Islamic banking and finance, but we could not detect any studies published on comparative analysis of financial performance of Islamic and conventional banks of Pakistan.

### 1.1 Background of Islamic Banking and Finance

The current revival of Islamic banks started in the last thirty years. The model of Islamic banking has not been completely established. Just a small number of credit instruments have been introduced, yet. New financial instruments have been following the obligations of Islamic Shari'ah in a legal way, but they do not have much concern with the attainment of the goals of Islam (Maqasid-e-Shari'ah). There are many Islamic banks operating across the globe these days and people consider them as a feasible system in which they can invest their money with greater options. Islamic banks were primarily started to serve only the Muslims, but they are now being known to the rest of the world as well. It is now considered as one of the fastest developing fields. Islamic banks started to grow with a rapid speed a few years after the establishment of first Islamic bank in Egypt in 1963 (Ahmad et al., 2010). The contribution of Islamic banking in the banking industry of the countries has become significant and is continuously growing.

Three decades ago, there was only one Islamic bank; whereas today, there are more than three hundred Shariah-based financial institutions in more than three hundred countries (El Qorchi, 2005). Some countries are very popular now in sense of Islamic Banking e.g.

---

\*Corresponding author.  
Email: ali62193@gmail.com

Iran and Sudan where Islamic Banking is prevalent. Europe also couldn't deny the importance of Shariah banking and for the same reason; Islamic Banking is a niche for some European and U.S banks (Hesse et al., 2008).

Presently, \$2 trillion of global banking assets are owned by the Shariah compliant Islamic financial Institutions. Out of which, 80% is covered by pure Islamic banks and Islamic windows of non-Shariah commercial banks. Sukuk - the Islamic bond, accounts for 15%, while Islamic mutual funds are composed of 4% and finally Takaful which is the name of Islamic insurance service, accounts for only 1% of global banking assets (The Economist, 2014). Talking about the Islamic banking and its composition in proportion with respect to countries, we find that the biggest player of this industry is Iran, as it accounts for 40% of global Islamic finance assets followed by Saudi Arabia, which accounts for 14%. These are followed by some other countries which have less than 15% share of Islamic Finance assets, top of which is Malaysia with 10% assets while Kuwait and UAE collectively account for 9%. In terms of country proportion of assets, Saudi Arabia owns 35% of total banking assets, while the percentage is a bit lower in case of UAE, Qatar and Malaysia, which stands at 22%, 20% and 20%, respectively. Looking at the big picture, Islamic banks and financial Institutions just account for 1% of the global financial assets (Credit Suisse's, 2013). Islamic banks have a number of characteristics that make them less exposed towards risk as compared to conventional banks. For instance, if the bank has a loss in Musharaka, it will show a negative amount on the assets side, providing the depositors with more protective layer. There are certain factors that force Islamic banks to become conservative, some of them include provision of competitive and stable profits to the depositors. Similarly, Islamic banks are now having a large portion of reserves and capital through their account holders. Thus, an inquiry into the issue of financial stability is very crucial in order to see how Islamic banking industry buffers the effects of risks.

Thus, the question arises if there is a way to figure out the stability of Islamic banks? This question is empirical in nature and can be answered through the use of econometric models. Since the answer to this question may vary from bank to bank and country-wise, thus, inclusion of some data at bank-level and across country-level is essential to answer this question. The section below discusses country-wise background of Islamic banking and finance.

## 1.2 United Arab Emirates

Islamic finance industry was first commenced with the advent of Dubai Islamic Bank in UAE in the year 1975, which is the first full-fledged Shariah bank in the UAE. Since then, the Islamic banking industry started

to flourish there. Soon after that, Sharjah Islamic Bank commenced its operations in 1979. At present, there are eight Shariah banks conducting their operations in UAE with a total of more than 260 branches in various areas of UAE. Looking at the factual details, we come to know that these eight banks account for 16.2% of total banking assets in the UAE, which is a significant and non-negligible part (Chamber of commerce, 2011). According to a report of Dubai Chamber of Commerce in 2011, banks in UAE are going on with a steady growth and it will continue to grow in the same manner in the next few years because of increase in population and income. Currently Global share of Islamic Banking in the UAE banking system is 9%, which is in line with Kuwait. However, within UAE 22% of total deposits are captured by these banks (Abedifar et al., 2015).

## 1.3 Saudi Arabia

Up to 2005, there were only two banks in Saudi Arabia, but presently, there are five Islamic banks operating there. Very interestingly, 64 percent of total banking assets in Saudi Arabia are owned by Shariah banks News (2006). A number of conventional banks are moving towards Shariah compliance and for the same reason Islamic banking industry is growing there with a swift speed. The national commercial bank of Saudi is also intended to become an Islamic bank in the near future. SAAB is an Islamic Insurance company which has recently started its operations in Saudi Arabia. It is expected that Takaful Industry will grow rapidly in the coming years and will soon account for 15% of total banking assets in the country. Currently growth rate of Islamic Banking system in the region is 13% (Alanazi and Lone, 2016). Total deposits in the region in Islamic banks are 14.29% as compared to that of 7.25% in 2000. These funds crossed 2000 Billion Dollar point in 2015 (Barakat et al., 2016).

## 1.4 Pakistan

In Pakistan, there was an Islamic banking movement around 1980s. However, Islamic banking actually got a virtual start in Pakistan in 2002, when dual banking system was introduced. Names of Islamic Banks in the country are Meezan Bank, BankIslami Pakistan, Albaraka, Burj bank, and Dubai Islamic. According to a study conducted in 2006, the financial assets of Islamic banks accounted for only 2.2% of the whole banks of the country (Al-Refai, 2006). Due to the issuance of a circular from SBP, all conventional banks are now needed to open Islamic windows. The securities and exchange commission of Pakistan is continuously making efforts in this regard. A number of Insurance companies like Dawood, Takaful etc. are also operating in the country (SBP, 2014). At present there are 5 full-fledged Islamic and 15 conventional banks in

Pakistan, with 1,314 branches in 2014; however, there were only 15 branches in 2007. Talking about assets of Islamic banking in Pakistan, the figure was Rs.118 Billion in 2007 and it gradually reached to Rs.1016 Billion in 2014. Total Islamic banking assets jumped to Rs. 872 Billion in 2014 from Rs. 83 Billion in 2007 (SBP Islamic Banking Bulletin, 2014). Islamic Banks account for 9.7% of total bank deposits in the country while, 11.4% of total banking deposits are captured by Islamic banks as compared to that of 0.5% in 2003 (Ali, 2015).

## 1.5 Bangladesh

In Bangladesh, Islamic banking concerns started in 1980s. And soon after, first Islamic bank with the name of Islamic Bank Bangladesh was established in the country, in 1983. The industry is on the way to flourish in Bangladesh. In 2005, the 10% of total cash deposited in the banks of the country was deposited in Islamic banks, out of which 10% investment denominated 5% (Rana, 2006). In early 2005, the government of the country made a committee for amending the insurance act of the country with a view to introduce Islamic friendly Insurance services as well. By the end of 2012, total credits and deposits captured by Islamic banks in the country were 21.6% and 18.8%, respectively. The total number of Islamic bank branches increased from 3 in 1983 to 751 in 2011. At present, the number of Islamic and commercial banks in Bangladesh is 8 and 48 respectively. A number of commercial banks have also opened Islamic windows.

## 1.6 Objectives and Significance

The core objective of the study is to fill an important gap in the literature of Islamic banking on financial stability. To the best of author's knowledge, there exists no study in the history of Islamic banking which empirically analyses financial stability of banks on a cross country level. Understanding the issue on a cross country basis is very important because if data are taken from only a single country, it may be affected by some control variables, which are prevailing and affecting financial dependability in that country only. Thus, data have been collected from four of the Asian countries for the purpose of comparing financial soundness of Islamic banks in an Asian context. The study has six core objectives,

1. Comparing financial stability of Islamic Banks in Middle East and South Asia.
2. Finding the determinants of financial stability of Islamic banks in Bangladesh.
3. Finding the determinants of financial stability of Islamic banks in Saudi Arabia.

4. Finding the determinants of financial stability of Islamic banks in UAE.
5. Finding the determinants of financial stability of Islamic banks in Pakistan.
6. Comparing financial stability of Islamic banks across bank size.

The study provides foundation for the exploration of stability on a cross country level.

## 2 Literature Review

### 2.1 Financial Stability of Islamic banks

Before examining the financial stability of Islamic Shariah banks, we need to look at the milestone studies that have been conducted in this field. Emerging yet integral role of Islamic finance industry has forced the researchers, scholars and stake holders to examine its efficiency as compared to the commercial banking Industry. A major portion of previous studies had focused on the comparisons of products and mechanisms that are used in Islamic and Commercial banking (Ainley et al., 2007; Jobst, 2007; Sole, 2007; Sundararajan and Errico, 2002).

Cihák and Hesse (2008), based on the data collected from 20 countries, including 397 conventional and 77 Islamic banks during the period 1993 through 2004, tested the relative financial soundness of Shariah or Islamic Banks. They categorized the results of their study on the bases of banks size and concluded that Small commercial banks were financially less strong than small Islamic banks. This may suggest that Islamic banks may face challenges related to credit risk management as they grow larger.

The efficiency and stability of commercial and Islamic banks is still considered a viable question for stake holders and researchers. Ahmad et al. (2010) conducted a study using data from 2001 through 2006, of four Asian countries, namely Pakistan, Bangladesh, Malaysia and Indonesia for investigating financial efficiency of their respective banking systems. Their efficiency estimates were based on non-parametric DEA (Data Envelopment Analysis). Findings of the study imply that Asian Islamic banks are operating at optimal level, but at the same time on the other hand they are facing managerial inefficiency in controlling their costs and are not able to utilize their resources fully. Similarly, another study concluded that large Islamic banks were financially less strong than large Commercial banks (Shajari and Mohebikhah, 2012). Talking about the latest studies in the literature, Husein (2014) examined the financial stability of Islamic banks by taking 102 banks data from Indonesia. He used Z-Score as a proxy of stability. The findings of the study determined that the size of banks has a significant im-

impact on its stability status and over all stability of an Islamic bank in general is associated with its assets and income diversity. The study findings also suggest that large Islamic banks are financially stronger than the small banks and finally the small Islamic banks are financially stronger than those of medium sized Islamic banks. The final finding is representative of critical issues of financing risk Management for medium size Shariah banks.

## 2.2 Z-Score as Measure of Financial Stability

In the previous empirical literature of banking, Z-score has been a popular proxy of probability of failure of bank. [Boyd et al. \(1993\)](#); [Boyd and Runkle \(1993\)](#); [Hanan and Hanweck \(1988\)](#), in their studies have utilized Z-score as a measure of probability of risk, which in other words represents the likelihood of insolvency of the bank. Z-score is such a measure of bankruptcy, which measures the financial stability of bank that shows the distance from volatility, leverage and insolvency.

[Cihák and Hesse \(2008\)](#); [De Nicolo \(2001\)](#); [Worrell et al. \(2007\)](#), tested financial strengths of banks with Z-score. [Uhde and Heimeshoff \(2009\)](#) used penal data from 2600 financial institutions in the European Union using Z-Score as a key variable, in order to judge the stability of German banks with various ownership structures. [Kick and von Westernhagen \(2009\)](#) collected penal data during the time span of 1995 through 2007. Reading along the lines of literature finally [Maji et al. \(2011\)](#) have also examined riskiness and likelihood of insolvency of Indian banks, using Z-score as a risk index in order to evaluate the riskiness of Indian banks and probability of book value insolvency. As per the trend of literature, the present study has also considered Z-Score for measuring financial stability.

## 3 Methodology

The current study uses the data of five Islamic banks as a sample for the analysis in four of the Asian countries. The data were collected from the population of Islamic banks of two of the south Asian countries, Pakistan and Bangladesh and two of the Middle Eastern Asian countries, U.A.E. and Saudi Arabia. The study considers banks data on individual basis, collected from annual financial reports of the banks, while some data were taken from official stock exchanges of the respective countries and finally some were collected from World Bank database. Choice of these countries for the research was dictated by the fact that there exists a sizeable share of Islamic banking in these economies. Secondly, the empirical analysis has been conducted on the basis of un-consolidated financial data. In terms of an

ideal situation, the study should have chosen all consolidated data. We, therefore, used consolidated data wherever available, but when consolidated data were not available for a bank, the unconsolidated data were used instead. Thirdly, the new fashion in the international industry is to open an Islamic window and most of the banks in Muslim countries are following this practice, yet the study considers data only from those banks which are fully Shariah-based.

## 4 Results and Discussion

Moving towards the regression first of all we run Hausman test for all the four countries independently. Hausman test of all the countries given a probability value of more than 0.5, which gave us reason to run the regression using random effect model. The results of inter country random effect model are given in Table 2 and 3.

As the data are from four countries we can understand the level of diversification in the economic and regulatory conditions by the descriptive statistics. The tables above indicate that Z score has a very high range its value ranging from -3 to 247. The Maximum value of GDP growth rate is 8.6 and lowest is 4.28. Zscore is also the variable which has highest standard deviation. In order to deal with the outliers available in the concerned data, we have used robust approach. The purpose of using robust approach is that this approach gives better results by reducing the impact of those variables, which have extra-ordinarily high values of residuals. This is done in accordance with the approach introduced by Hamilton (2002).

### 4.1 Regression Analysis

In order to deal with the issue of Multicollinearity VIF test was used and then regression analysis was done, which is given in Table 4, 5 and 6.

As per the table (4) above, for Saudi Arabia VIF is done twice because initially GDP and inflation had strong co-linearity so Inflation has been eliminated for Saudi Arabia.

Talking about Pakistan Inflation has positive relationship with the ZScore of Pakistani Islamic banks. Now let's talk about the impact of bank level independent variables on our primary dependent variable, ZScore. Banks that have a high loan to asset ratio tend to have lower values of Zscore, which means that banks with higher loan to asset ratio are generally less financially stable. Moving on towards the cost to income ratio we come to know that cost to income ratio has positive relation with financial stability of Pakistani banks. The higher this ratio the higher the ZScore and the financial stability of the banks.

According to the assumptions a negative relation be-

Table 1: Pearson Correlation Matrix

	Loan to asset	Cost to income	Inflation	GDP growth	Z-Score
Loan to asset	1				
Cost to income	-0.144	1			
Inflation	0.014	0.148	1		
GDP growth	0.067	-0.164	.454**	1	
Z-Score	-.440**	-0.132	-0.121	0.041	1

\*\**. Correlation is significant at the 0.01 level*

Table 2: Descriptive Statistics

	Range	Minimum	Maximum	Mean	Std. Deviation
Loan to asset	0.91	0.06	0.97	0.56	0.22
Cost to income	10.01	-0.01	9.99	0.96	1.39
Inflation	39.6	-18.9	20.7	7.82	9.47
GDP growth	13.8	-5.2	8.6	4.28	2.83
Z-Score	249.78	-2.92	246.86	26.16	34.59

<sup>1</sup>*In Unconsolidated data the figures are calculated on the basis of data from only one country*

tween loans to asset is due to the reasons that if the amount of loans is more as a percentage of total assets in Pakistani Banks, then the banks are not able to properly handle those loans and thus cannot retain a steadiness in their returns. The cost to income ratio has a positive relationship with zscore, because the more the cost the banks incur as percentage of operating income the stable it is. In other words when cost to income ratio increases it also enhances the financial stability of the banks. The reason behind this relation is that effective operations and proper loan collection happens when banks increase their operating costs. Gross domestic products growth rate which is a macroeconomic level control variable also has a positive relation with financial stability of Pakistani Islamic Banks.

The results of Bangladesh are almost in opposition of Pakistan, except for results of inflation, which are in accordance with Pakistan. Inflation has a positive influence on ZScore in Bangladesh. The higher the loan to asset ratio, the more financially stable the Islamic banks are. Enlightening about cost to income ratio, we come to know that it has a strongly negative relationship with the financial stability of Islamic banks in Bangladesh. The only variable left behind for discussion in Bangladeshi contest is GDP growth which has a negative relation with Zscore. Here we have two macroeconomic variables one has positive and the

other has negative relationship with our dependent variable.

Our model fits best in UAE, because in this case all our variables have significant positive relationship with the ZScore except the inflation, which has slightly negative relation with of financial stability. The strength of cost to income relation is far higher as compared to the relation of cost to income with the financial stability of Islamic Banks in UAE. GDP also has a positive relation, which means that Higher the GDP Growth rate higher is the financial stability of Islamic Banks in UAE.

The last country of our interest for this particular study is Saudi Arabia. As it was in case of UAE, of the Macroeconomic variables, GDP has positive relationship with financial stability of Islamic banks in Saudi Arabia as well. Talking about banks specific independent variables, we see that Loan to asset has strongly negative relationship with financial stability; on the other hand cost to income has positive relation with the ZScore.

As per the analysis, findings suggest that all of the four independent variables, two have positive and the remaining two have negative relationship with the only dependent variable ZScore; higher the inflation, higher the stability of banks. Loan to asset has direct relation with financial stability, which means that when loans as a percentage of total assets increase it has a good im-

Table 3: VIF Test

	Pakistan	Bangladesh	UAE	Saudi Arabia	Saudi Arabia
Loan to asset	1.05	1.22	1.31	1.44	1.33
Cost to income	1.09	1.04	1.39	1.46	1.31
GDP growth	1.25	5.64	2.4	40.37	1.02
Inflation	1.19	5.25	2.44	40.77	

pact on the financial stability of the bank. This is because when a bank has good portfolio of loans, it also has a high profitability. An initial observation of the z-scores tells high variability within the chosen sample, with the z-score fluctuating from -2 to 110 and 246. The high variability shows the existence of outliers within the sample data, which have a noticeable effect on the above mentioned results.

## 4.2 Reasons for Country Wise Differences in Results

Out of the two control variables inflation has negative relation with financial stability indicating that in Middle East as well as in South Asia, generally increase in price level dampens the financial soundness of Islamic banks. Talking about loan to asset ratio it has positive relation with financial stability in case of Pakistan and UAE but negative in case of Bangladesh and Saudi Arabia. The difference can be attributed to the fact that Pakistan and UAE have good credit risk monitoring system in between bank and the borrowers, e.g. Small medium enterprises or companies as compared to that of Saudi Arabia and Bangladesh. Moreover, the results of cost to income ratio tell us that when Islamic Banks of Pakistan, UAE and Saudi Arabia raise their operating cost as a percentage of operating profits, it resultantly encourages financial stability. The same variable has negative relation with stability in Bangladesh, because their Islamic Banks cannot manage their operating costs effectively. In other words they have a high operational risk as compared to that of other countries in the sample. A direct relationship of growth in gross domestic product in UAE, Saudi Arabia and Pakistan suggests that GDP growth encourages financial stability of Islamic Banks in these three countries.

Taking ZScore as key indicator of financial stability as suggested by Husein (2014) we can see that Islamic banks in Bangladesh are less stable then the banks of Pakistan, as shown in Figure 1. On the other hand, if we take a look at the results of Islamic banks of Middle East, Banks in Saudi Arabia have high financial stability. To conclude we can say that Islamic banks of Middle East are more stable as compared to the Islamic banks of South Asia.

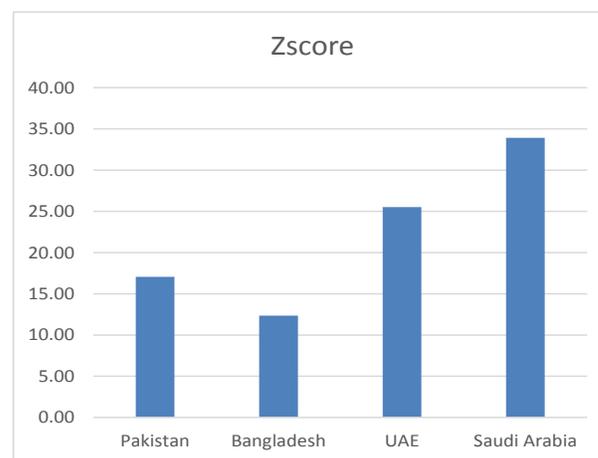


Figure 1: Z-score.

Following is the discussion of sample countries data on the basis of size. According to our designated criteria Pakistan has only one large bank that is Meezan Bank and rest of the banks in Pakistan are small banks. As per the comparison graph, it is shown that Small Islamic banks are more stable than large Islamic banks. On the other hand the Islamic banks of Saudi Arabia, UAE and Bangladesh are all large banks. So comparing 19 bank may not be an appropriate comparison, therefore, we just made comparison of small and large banks in Pakistan. On the basis of size Small Islamic banks are more stable than that of large Islamic Banks.

## 4.3 Theoretical Contribution and Managerial Implication

This study is pioneer in exploring the determinants of financial stability of Islamic Banks on Inter country level. It has contributed to the literature of Islamic finance and financial stability. This is first inter-country financial stability of Islamic banks study and thus is useful for internal as well as external users of financial information of shariah banks. Talking about internal users, inside policy makers of the Islamic banks can strive to diminish the elements that have negative relationship with financial stability; on the other hand, they can try to enhance the elements that have positive

Table 4: Regression Results: Ordinary Least Squares (2008-2013)

Variable	Pakistan	Bangladesh	Saudi Arabia	United Arab Emirates	South Asian Banks	Middle Eastern Banks	All Banks
Constant	-11.44 (0.000)***	18.144 (0.034)**	-25.634 (0.075)*	-29.705 (0.000)***	18.344 (0.022)**	-12.429 (0.045)**	18.144 (0.000)***
Loan/Asset	-2.025 (0.016)**	11.652 (0.034)**	-19.501 (0.000)***	60.966 (0.000)***	3.485 (0.002)***	-30.22 (0.005)***	11.652 (0.062)*
Cost/Income	1.613 (0.000)***	-9.924 (0.064)*	59.539 (0.000)***	7.436 (0.043)**	1.442 (0.000)***	11.186 (0.028)**	-9.924 (0.054)**
GDP Growth	1.587 (0.000)***	-2.85 -0.104	4.402 (0.000)***	2.561 (0.000)***	1.144 (0.015)**	2.182 (0.001)***	-2.85 (0.001)***
Inflation	0.311 (0.000)***	1.674 -0.223		-0.501 (0.000)***	0.905 (0.069)*	1.716 (0.000)***	1.674 (0.008)***
R-Squared	0.998	0.653	0.82	0.996	0.653	0.997	0.653

*p-values in parentheses*

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

relation with the financial stability of banks. Moreover, there are certain managerial implications of the study for external users as well. The study is useful for corporate customers, as well as other retail customers and depositors of the banks.

The study may also be useful for the governments and regulators of the respective countries.

## 5 Conclusion

The present study has worked out first inter-country empirical analysis for exploring financial soundness of Islamic banks with Islamic banks. Z-scores have been used as a representative of stability. The findings suggests that (i) small Islamic banks are tend to be financially more sound and stable than larger Islamic banks; (ii) Islamic banks in UAE and Saudi Arabia (Middle East) are financially more stable and sound than the Islamic banks in Pakistan and Bangladesh (South Asia). The comparison between high financial stability in large Islamic banks and the comparatively low financial stability in small Islamic banks attracts the interest of researchers toward it. Results posit that, comparatively Islamic banks are more financially stable when conducting operations on a small scale, and are more likely to be financially stable when they are running their operations on a large scale. A reasonable interpretation for the results reported in the study propose that it is considerably more complicated for Islamic banks to adjust their credit risk checking system as soon as they grow larger in terms of total assets. Looking at their limitation in standardization of management of credit risk, and taking account of the numerous profit-loss-investments become more complicated when the level of operations of the bank rises up. One more finding



Figure 2: Z-score.

Table 5: Regression Results: Robust Estimation (2008-2013)

Variable	Pakistan	Bangladesh	Saudi Arabia	United Arab Emirates	South Asian Banks	Middle Eastern Banks	All Banks
Constant	-11.325 (0.000)***	17.104 (0.035)**	-12.106 (0.000)***	-43.985 (0.000)***	17.104 (0.001)**	-9.228 (0.000)***	17.104 (0.000)***
Loan/Asset	-2.315 (0.000)***	12.481 (0.016)**	-5.318 (0.000)***	36.366 (0.000)***	12.481 (0.000)***	-7.816 (0.000)***	12.481 (0.000)***
Cost/Income	1.615 (0.000)***	-9.811 (0.000)***	12.151 (0.000)***	-10.537 (0.000)***	-9.81 (0.000)***	23.228 (0.000)***	-9.814 (0.000)***
GDP Growth	1.588 (0.000)***	-2.461 0.148	9.851 (0.000)***	1.867 (0.000)***	-2.461 (0.031)**	1.868 (0.000)***	-2.461 (0.001)***
Inflation	0.312 (0.000)***	1.415 (0.293)		-0.462841 (0.000)***	0.905 (0.118)	-30.221 (0.000)***	1.415 (0.023)**
R-Squared	0.961	0.607	0.964	0.867	0.607	0.982	0.653

*p-values in parentheses*

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

which raises attention toward Islamic banks in Middle East is that they focus more on investments with low level of risk and fee income related to that investments and bank charges. On the other hand, Islamic banks in South Asia do more business in PLS Investments. The findings are in accordance with [Cihák and Hesse \(2008\)](#); [Husein \(2014\)](#); [Shahid and Abbas \(2012\)](#).

## 5.1 Limitations

One of the major limitations was no access to entire facts and figures of the used data, dependence on the unconsolidated financial statements data. Secondly, the current study has taken into account only those Islamic banks which are conducting all their operations according to the principles of Islamic finance and did not consider the banks which are conventional with Islamic "windows" or have only some Islamic branches being operated. Additionally, limitations of the data restricted from analyzing all the issues related to financial contracts of Islamic nature, such as, by differentiating between various investments and PLS arrangements. Moreover, it's not justifiable to generalize the results of this study on the basis of just four countries. Finally the data of initial years used in the study are possibly affected by and have the effects of global financial crises.

## 5.2 Future Research Direction

First of all the sample data selected for present study can be further prolonged to a larger number of countries and more number of banks, maybe by using data sources other than the sources that this study utilized. Also, the future researchers may effort to work on the financial stability effects of Islamic finance institutions of other types rather than the completely Islamic banks examined in present study, e.g. Islamic insurance companies and the commercial banks with Islamic windows.

## References

- Abedifar, P., Ebrahim, S. M., Molyneux, P., and Tarazi, A. (2015). Islamic banking and finance: Recent empirical literature and directions for future research. *Journal of Economic Surveys*, 29(4):637–670.
- Ahmad, N. H. b., Noor, M. A. N. M., and Sufian, F. (2010). The efficiency of islamic banks: empirical evidence from the asian countries' islamic banking sectors. *Journal for International Business and Entrepreneurship Development*, 5(2):154–166.
- Ainley, M., Mashayekhi, A., Hicks, R., Rahman, A., and Ravalia, A. (2007). Islamic finance in the uk: Regula-

- tion and challenges. *London: Financial Services Authority*, page 13.
- Alanazi, E. S. M. and Lone, F. A. (2016). Social satisfaction towards islamic banking in saudi arabia: A survey. *Asian Social Science*, 12(1):182.
- Barakat, H. J., Shatnawi, H. A., and Ismail, S. T. (2016). The role of marketing information systems in reducing the effects of the international financial crisis: A study applied on the banks working in the kingdom of saudi arabia from islamic perspective. *International Journal of Marketing Studies*, 8(1):181.
- Bashir, A.-H. M. (2001). Assessing the performance of islamic banks: Some evidence from the middle east.
- Boyd, J. H., Graham, S. L., and Hewitt, R. S. (1993). Bank holding company mergers with nonbank financial firms: Effects on the risk of failure. *Journal of Banking & Finance*, 17(1):43–63.
- Boyd, J. H. and Runkle, D. E. (1993). Size and performance of banking firms: Testing the predictions of theory. *Journal of monetary economics*, 31(1):47–67.
- Cihák, M. M. and Hesse, H. (2008). *Islamic banks and financial stability: An empirical analysis*. Number 8-16. International Monetary Fund.
- De Nicolo, G. (2001). Size, charter value and risk in banking: An international perspective.
- El Qorchi, M. (2005). Islamic finance gears up. *Finance and Development*, 42(4):46.
- Hannan, T. H. and Hanweck, G. A. (1988). Bank insolvency risk and the market for large certificates of deposit. *Journal of Money, Credit and Banking*, 20(2):203–211.
- Hassan, M. K. and Bashir, A.-H. M. (2003). Determinants of islamic banking profitability. In *10th ERF annual conference, Morocco*, pages 16–18.
- Hesse, H., Jobst, A. A., and Solé, J. (2008). Trends and challenges in islamic finance. *World Economics*, 9(2):175–193.
- Husein, M. F. (2014). The stability of islamic banks in indonesia. In *2nd IBEA-International Conference on Business, Economics, and Accounting*, pages 26–28.
- Jobst, A. A. (2007). The economics of islamic finance and securitization. *The Journal of Structured Finance*, 13(1):6–27.
- Kick, T. B. H. H. T. and von Westernhagen, N. (2009). Bank ownership and stability: evidence from germany. *Issues*.
- Maji, S. G., Dey, S., and Jha, A. (2011). Insolvency risk of selected indian commercial banks: A comparative analysis. *International Journal of Research in Commerce, Economics and Management*, 1(5):120–124.
- News, A. (2006). Saib launches islamic banking program. *Annual Report (2011-2012)*.
- Rana, F. (2006). Growing business prospect of islamic banking. *The Daily Star*, 28:5.
- Samad, A. and Hassan, M. K. (1999). The performance of malaysian islamic bank during 1984-1997: An exploratory study. *International Journal of Islamic Financial Services*, 1(3):1–14.
- SBP (2014). State bank of pakistan - islamic banking bulletin 2013-2014.
- Shahid, M. A. and Abbas, Z. (2012). Financial stability of islamic banking in pakistan: An empirical study. *African Journal of Business Management*, 6(10):3706.
- Shajari, P. and Mohebikhah, B. (2012). Financial stability in islamic banking system; the capacity to react to current world wide crisis. *Money and Economy*, 6(4).
- Sole, J. A. (2007). Introducing islamic banks into conventional banking systems.
- Sufian, F. (2007). The efficiency of islamic banking industry in malaysia: Foreign vs domestic banks. *Humanomics*, 23(3):174–192.
- Sundararajan, V. and Errico, L. (2002). *Islamic financial institutions and products in the global financial system: Key issues in risk management and challenges ahead*, volume 2. International Monetary Fund.
- Uhde, A. and Heimeshoff, U. (2009). Consolidation in banking and financial stability in europe: Empirical evidence. *Journal of Banking & Finance*, 33(7):1299–1311.
- Worrell, M. D., Maechler, A. M., and Mitra, M. S. (2007). *Decomposing financial risks and vulnerabilities in Eastern Europe*. Number 7-248. International Monetary Fund.

# Effects of Social Media Brand Reviews on Trust and Brand Perception: An Experimental Study on Facebook in Pakistani context

Junaid Saddique\*, Imran Qureshi, Atif Shabbir

*International Islamic University Islamabad*

---

**Abstract.** Attraction towards social networking sites is increasing day by day. People join social networking sites to communicate with their friends, share their feelings and gain information from different platforms. One of the most popular social networking sites is Facebook with 1.7 billion active users. However, there are many users of Facebook with fake identities, communicating with other users just for fun and enjoyment. Companies are also attracted towards Facebook for advertisement, consumer engagement and feedbacks of customers bearing very low cost. However, users with fake identities also like different products and leave their comments on different brand pages. So companies are unable to get true picture of customer's feedback and these fake reviews also damage trust of other customers. Current study examined the effect of brand page reviews on customer's trust, perceived risk and perceived benefit. Both fake and original comments were considered in study. Effect of reviews is tested on three types of trust (interpersonal trust, dispositional trust and institutional trust). Experimental approach was used to collect data from 300 participants. Regression analysis was used to test the hypotheses of study. Results show that people believe more in comments and information provided by their friends or by third party. While getting information from social media, users trust comments and reviews provided by other users without differentiating original and fake comments. Users of Facebook trust in brand but normally ignore information provided by company itself. Furthermore, other users of social networking sites are affected by comments and reviews. Managerial implications are also discussed.

---

## 1 Introduction

Social media is leading new media for the last decade or so. People have got new ways to communicate with one another such as blogs, social networking websites, etc. After discovering social media, social networking sites (SNS) have introduced new methods of communications in different directions. Open communication forums are being used by different sites, such as Twitter and Facebook to support and maintain conversation among their users (Nelson-Field et al., 2012). Furthermore, social networking sites also allow their users to communicate with businesses and companies directly, which help companies and businesses to interact with their customers and take their feedback. The most popular social networking website is Facebook.com (Nelson-Field et al., 2012), with over one billion profiles worldwide (Facebook, 2013). However, many people use Facebook for fun and enjoyment (Qureshi and Mir, 2013) which sometime created problem for different organization and even for other people. On 2nd of Dec. 2014 Dawn reported that "fake Facebook accounts used to be a problem faced by teenage girls, but it appears that in Pakistan, they are also becoming

a bother for the military and the Inter-Services Intelligence (ISI)" (Dawn, 2014). A formal complaint was registered by ISI and the military to Pakistan Telecommunication Authority (PTA) and Ministry of Information Technology (MOIT) that there was existence of fake accounts on social networking sites with the name of their chiefs. So many people join social media just for fun however other join social media for purpose of information. Information provided by other consumers may increase trust and reduce perceived risk. Trust is an ongoing issue in e-commerce (Gefen et al., 2011) and can be increased by social commerce and social support. In fact, to endorse trust in an online context, there is a need to provide credible signals to re-assure e-vendors (Ba and Pavlou, 2002).

Most of the companies are engaging customers by advertising on social media. So a lot of researchers have calculated brand engagement in social media through different means and according to them counting of likes and comments on Facebook presents brand engagement (Chauhan et al., 2013; Hoffman and Fodor, 2010; Malbon, 2013). On the other hand, different researchers have explored the use of Facebook. According to some studies, people like a brand because of self-expression; while others say that users like brands to create relation-

---

\*Corresponding author.  
Email: junaidpac@gmail.com

ships with other users. However, the main purpose is to enter a platform to chat with other people (Back et al., 2010; Schau and Gilly, 2003); Lipsman et al., 2012; Trusv et al., 2009; (Nelson-Field et al., 2012). Thus, brand engagement based on the counting of likes does not give a clear picture.

In Pakistani context there may be another reason because of which brand engagement cannot provide a clear picture. Basically, people like and comment on a brand page for self-expression, while using social media (Tariq et al., 2012). However, researchers have only explored the likes and comments on brand pages but they were unable to explore whether it affects trust and perception or not. A few researchers have studied the intentions of users to use facebook in Pakistan and they found that people in Pakistan use facebook for enjoyment and information (Qureshi and Mir, 2013). People who use facebook for enjoyment purpose have fake identities on facebook (Tariq et al., 2012) as people like and comment on brand pages/forums for self-expression (Nelson-Field et al., 2012). So people with fake identities also like and comment on brands, which is not a true picture of brand engagement.

If a person without prior knowledge wants to buy a product, he/she will consult his/her friends or will use online sources to gain information. In latter case other customers' reviews have an effect on his decision making (Malbon, 2013). Therefore, word of mouth way of communication has been of interest to marketing personnel for some time (Anderson, 1998; Richins, 1984). Consequently, customers trust on online comments of other customers while making decisions. However, fake users on Facebook and their comments on brand pages also have an impact on another customer's decision.

In current research, reviews are indication of visitors of brand page. These signals are found to be strong predictor of trustworthiness (Utz et al., 2012). A survey stated that 70 Percent of consumers trust the reviews from other people (Nielsen, 2009). Different researches have worked on trust in online reviews (Racherla et al., 2012; Sparks and Browning, 2011; Sparks et al., 2013). However, there are previous researches on trust in fake reviews (Lappas et al., 2016; Liu, 2013; Mukherjee et al., 2012). Furthermore, there is no previous research on trust effecting perceived risk and perceived benefit regarding social media. Trust and risk are treated differently by different researches. However, majority have stated risk as outcome of trust (Ivanov and Ganey, 2014; Kim et al., 2008; Nooteboom et al., 1997).

Quite a lot of researches have been conducted on social media in different aspects. Many researchers have worked on "likes" of brands in social media (Lin and Lu, 2011; Phua and Ahn, 2014); while some others have worked on behavior of social media users (Hajli, 2015; Liang and Turban, 2011); (Fue, Li, & Wenyu, 2009). However, trust is topic of interest for many scholars (Coppola et al., 2004; Jarvenpaa et al., 1999); (Meyerson,

1996; Piccoli & Ives, 2003). In Pakistani context, there is no research, including the trust of customers on fake comments and their perception.

The purpose of current study is to gauge the effects of online comments on customer's trust, perceived benefit and perceived risk. Most of the researchers have conducted limited researches on consequences and antecedents of trust. A gap exists in linking the consequences of online trust to perceived benefit and perceived risk of services and products in social media. Similarly, most of the researches are limited to western context and mostly focusing on US (Ba and Pavlou, 2002; Ba et al., 1999; Castelfranchi, 2003; Tan and Thoen, 2000). Theories developed for the western culture might not be applicable in other societies, especially since the culture is affecting the outcome of trust (Sako and Helper, 1998). Several study findings have posited that perceptions of trust differ from culture to culture, the way in which it was formed and the way of conceptualization (Sako and Helper, 1998). Therefore, there is a need to re-examine the concept of trust and its outcome in different cultures and markets (Lee and Turban, 2001).

## 1.1 Background of Facebook

Social networking sites especially Facebook has been converted to a cultural phenomenon (Nelson-Field et al., 2012) so quickly, but the research on social networking is not as ample as it should be. This is because of the changing nature of the websites, as well as the mostly individual experience of the site, that each user may encounter. Facebook has re-shaped cultural communication through diverse public (status update, wall post) so it is very important to study Facebook (Smock et al., 2011). Users of Facebook can communicate to each other throughout the world by updating status, wall posts, instant messenger and private messengers. Depending on the nature of desirous knowledge there are many theoretical frameworks producing different perspectives. For example, gratification theory is one popular theory related to Facebook, which explains why different users use various sites (Socket et al., 2011); (Tosun, 2012; Wang et al., 2012).

Companies need to connect and create a relationship with their consumers to understand human psychology. So they use Facebook as mode of communication with their customers. So from a practitioner and an academic perspective it is very important to study the relationship of organization and public.

So it's an attractive field for researchers to create brand engagement for customers through social media. Vast research has been conducted to study the brand engagement through social networking site, i.e. Facebook (Ellison et al., 2007; Kim et al., 2008; Smith et al., 2005). Companies are forced to get involved in social media so that customer can get engaged in specific brand. Com-

panies involve customers to respond by enhancing their offerings, handling problems and providing better service (Gummerus et al., 2012; Van Doorn et al., 2010). Over the past few years, brands have embraced social networking sites, i.e. Facebook as a key marketing channel to drive engagement and brand awareness (Malhotra et al., 2013).

## 1.2 Fake and Original Comments

Companies are collecting data from direct feedback loop of social media. Furthermore, some companies involve their customers in decision making for example Samsung modified the position of speakers of flat-screen TV by using online comments of customers (Klassen, 2009). Approximately 83% of Fortune 500 companies use some form of social media to connect and engage with consumers in the marketplace (Naylor et al., 2012). Brand engagement is one of the emerging topics for the managers of diverse industries and markets who aim to improve their company performance (Gummerus et al., 2012; Sashi, 2012).

Companies are moving toward Facebook by creating their brand page. With the help of their page they can cut down their advertising cost. Brand pages can be updated by posting new pictures and links, which help the companies to engage their visitors, including potential and current customers (Gummerus et al., 2012). However, it is a difficult job for companies to get real picture and feedback of their loyal customers. Number of likes and comments are counted by the companies to evaluate their brand, which might not be an accurate picture because there can be many motives to like and comment on a brand pages, other than engaging with the brand. For example, a user can like or comment on a brand due many reasons, such as self-expression, because friends have liked same page, for chatting purposes, etc. Additionally, there are tons of meanings associated behind likes, including different degrees of liking, and whether people judge the value of likes based on their relationships to others; e.g. friends, acquaintances, or strangers who like the brand. The most liked brand page on Facebook up until December 2013 was Coca-Cola with 72 million likes, followed by Redbull with 40 million likes; but these likes were unable to translate sale figures, which remained same. Sales figures are effective key performance indicators. These indicators help brands to measure the performance of their brand page, including the number of people who see the brand page and updates as a form of return on investment (Li & Bernoff 2011).

Online comments are one of the main constructs which shape social media. Facebook is one of the main social networking sites which allow its users to post new products, reviews about the products and rate those products (Chen et al. (2011)). Some new visitors visit a brand page to gain knowledge about that brand. Re-

views and rating provide them comprehensive knowledge about that specific product. These reviews and rating by third party decrease the need of customer for advertising information (Yubo & Jinhong, 2005). So rating and reviews provide effective information for customers (Füller et al., 2006). However, according to Tariq et al. (2012), most of the users in Pakistan are adults or underage and they use fake profiles on social network for enjoyment and upload inappropriate material on Facebook. These people with fake profiles like and comment a brand just for the sake of enjoyment; therefore, sometimes companies bear a big loss while making their decision about the brand. Information about the reviewer's identity has an effect on perceptions of members in particular community (Chris, Anindya, & Batia, 2008). Reviews and rating provided by third party is the main issue because those reviews can be fake. So E-vendors need to take action to get the information about the identities of the review generator (Chris et al., 2008) so that reviews and rating can be authenticated.

## 2 Literature Review

### 2.1 Trust

To reduce the uncertainty, companies need to build a trust of their products. Consumer trust is defined as "the expectation that a firm is dependable and will deliver on its promises" (Sirdeshmukh et al., 2002). Researchers argue that trust plays an important role to determine positive or negative effect on customer's perception. However, trust might be prejudiced by broader context, such as by designed features of website or by firm itself. There are many other factors which largely affect building of trust, such as frontline employees and the firm itself (Grayson et al., 2008). Trust plays a vital role in electronic market (Ba and Pavlou, 2002) and in the proposed model; trust plays a vital part as an independent construct. The present research investigates the limitations of the current literature and tries to develop a theoretical framework for the future of e-commerce and social commerce. The research explains a theoretical framework for social commerce drawing on social support theory, which in current study focused on forums and communities, ratings and reviews, recommendations and referrals.

Much more information is processed by the sellers about services and product as compared to buyers. In these situations, behavior can be explained by signaling theory. Signaling theory is development of economics (Spence, 1973), biology (Zahavi, 1975) and has been applied in information economics (Kirmani and Rao, 2000). Signaling theory explains that people heavily depend on signals if they need to evaluate a not so observable quality. Reliability of signals differs in nature. Assessment signals are highly consistent and

specify the possession of a resource by wasting it (Do-nath, 2007). Researchers have found that people rely more on the reviews and rating of other people as compared to firm because reviews generated by other people are unbiased. Therefore, reviews and rating by other people are considered more trustworthy (Bickart and Schindler, 2001; Smith et al., 2005). Signaling theory explains the same concept; if other customer or consumer states the trustworthiness of a brand that signal is deemed more reliable as compared to the signal generated by company. In current study, three dimensions of trust will be tested, i.e. dispositional trust, interpersonal trust and organizational trust. Dispositional trust is defined as the general expectation that the “word, the promise, verbal, or written statement of another individual or group can be relied on” (Rotter, 1967, 1980).

Interpersonal trust, thus can be defined as a psychological state comprising the intention to accept vulnerability to the actions of another individual (a trustee), based upon the expectation that the other will perform a particular action that is important to the trustier (Lewis and Weigert, 1985; Mayer et al., 1995). Organizational trust is defined as the positive expectations individuals have about the competence, reliability and benevolence of organizational members, as well as the institutional trust within the organization (D Harrison McKnight, 2002; Mayer et al., 1995).

## 2.2 Perceived risk and Perceived benefit

Literature suggests that in various technologies there is a negative correlation between judgment of benefit and judgment of risk (Alhakami and Slovic, 1994; Frewer et al., 1998; Gregory and Mendelsohn, 1993). For the stated association, different researchers have provided explanations. For example, in terms of general attitude, people may judge different attitudes as favorable or unfavorable (Alhakami and Slovic, 1994). To decrease risk and increase benefit, people heavily rely on their beliefs, which are perceived favorable for adoption of technology. Researchers have assumed that perception of benefit and risks affects the favorableness of technology. Similarly, perceived risk and perceived benefit are said to have a relationship with each other. However, perception about risk can be changed by altering perception about benefit (Frewer et al., 1998). It is difficult for people to accept benefits linked to technology, which causes decrease in risk perception (Siegrist and Cvetkovich, 2000). Those people who trust institutions have less perceived risk and high perceived benefits. Different researchers have studied influence of trust on different variables, for example influence of trust on risk perception (Flynn et al., 1992), trust influences risk (Bord and O'Connor, 1992; Groothuis and Miller, 1997), relationship between trust and acceptance of technology (Bord and O'Connor, 1992) and trust influences perceived risk (Jungermann et al., 1996).

According to different scholars there are different views about the relationship of trust. Some stated that trust is an outcome of risk; some say that trust and risk are same, while others suggested that trust is a by-product of risk. However, commonly trust and risk are treated as different concepts (Blau, 1964; Kee and Knox, 1970; Williamson, 1993); (Coleman & Coleman, 1994). Trust is defined as a manifestation of a behavior by a person, which is based on his/her beliefs about the characteristics of another person (Mayer et al., 1995). On the basis of definition, a model was proposed by (Mayer et al., 1995) in which characteristics of both the trustor and trustee are included in dyadic trust of organizational relationship that influences the formation of trust. Trust of trustee's ability, integrity and benevolence are represented in the model, which included all three characteristics. The logic explained in this model is that the trustor will create trust or an intention to acceptance toward trustee if he/she finds trustee's ability, integrity and benevolence sufficient. There will be risk relationship with brand if the trustor's trust in brand will exceed the threshold of perceived risk. So an action in which perceived risk of negative outcome is involved, that action is highly dependable on trust (Luhmann, 1980). However, all types of risk taking behaviors are not dependent on trust.

## 2.3 Online Reviews and Trust

Researchers have examined the structure of different social networking sites, i.e. Fliker and Yahoo (Kumar et al., 2010). They concluded that there is an existence of isolated communities and users in both networks, but whole social network has expanded because of powerfully connected sections. Furthermore, trust is influenced by social support or social context (Weisberg et al., 2011).

Customers are more secure when there are social applications on an e-commerce platform and consequently customer's intentions to buy increases (Hajli, 2012). When companies welcome new visitors to join a page or social platform and support them positively, then they increase their ratings. With the help of these interactions trust of customer increases and perception of risk decreases (Swamynathan et al., 2008). If the interaction on social network will be positive then user's trustworthiness will be high, while making a transaction (Swamynathan et al., 2008). Therefore, comments on Facebook will increase or decrease the trust of users.

## 2.4 Relationship of Trust (IV) with Perceived Risk and Perceived Benefit (DV)

Sjöberg (1998) inquired about perceived risk and its relationship with trust. He concluded that there is a weak relationship between perceived risk and trust on

the basis of Swedish data. According to Sjöberg, there might be limitation to importance of trust. People normally act on that information which is incomplete and imperfect. Consequently consumer has to bear some risk while making a decision. Benefits are provided as an incentive to consumers by perceived benefit, which is beneficial for them while making decision (Wilkie and Pessemier, 1973).

By combining both perceived benefit and perceived risk, (Peter and Tarpey, 1975) presented an attractive framework. They assumed that products have both negative and positive attributes. Customer decides on the basis of net attributes (positive and negative) to purchase a product or not. The framework is same as Lewin (1943) and Bilkey (1953); Bilkey (1955) theories, which provide a theoretical framework for this study.

People who trust institutions have less perceived risk and high perceived benefits. Different researchers have studied influence of trust on different variables for example influence of trust on risk perception (Flynn et al., 1992; Jungermann et al., 1996) and trust influences risk (Bord and O'Connor, 1992; Groothuis and Miller, 1997), relationship between trust and acceptance of technology (Bord and O'Connor, 1990, 1992).

Perceived risk is a kind of subjective expectation loss (Pavlou, 2003; Peter and Ryan, 1976). If the result of individual behavior is not favorable and is opposite to subjective feelings, then perceived risk will be produced and is related to the extent of potential loss (Cunningham, 1967). Previous researchers figured out that trust reduces perceived risk and uncertainty (Kim et al., 2008; Pavlou, 2003). Trust, perceived risk and perceived benefit are closely related to each other. According to valance framework, perceived risk is an outcome of trust because trust minimizes the perceived risk and maximizes the perceived benefits (Mou and Cohen, 2014).

Based on the literature above, following hypotheses have been developed:

*H1. Trust based on fake comments has a positive effect on perceived benefit.*

*H1a. Interpersonal trust based on fake comments has a positive effect on perceived benefit.*

*H1b. Dispositional trust based on fake comments has a positive effect on perceived benefit.*

*H1c. Institutional trust based on fake comments has a positive effect on perceived benefit.*

*H2. Trust based on fake comments has a negative effect on perceived risk.*

*H2a. Dispositional trust based on fake comments has a negative effect on perceived risk.*

*H2b. Interpersonal trust based on fake comments has a negative effect on perceived risk.*

*H2c. Institutional trust based on fake comments has a negative effect on perceived risk.*

*H3. Trust based on original comments has a positive effect on perceived benefit.*

*H3a. Interpersonal trust based on original comments has a positive effect on perceived benefit.*

*H3b. Dispositional trust based on original comments has a positive effect on perceived benefit.*

*H3c. Institutional trust based on original comments has a positive effect on perceived benefit.*

*H4. Trust based on original comments has a negative effect on perceived risk.*

*H4a. Institutional trust based on original comments has a negative effect on perceived risk.*

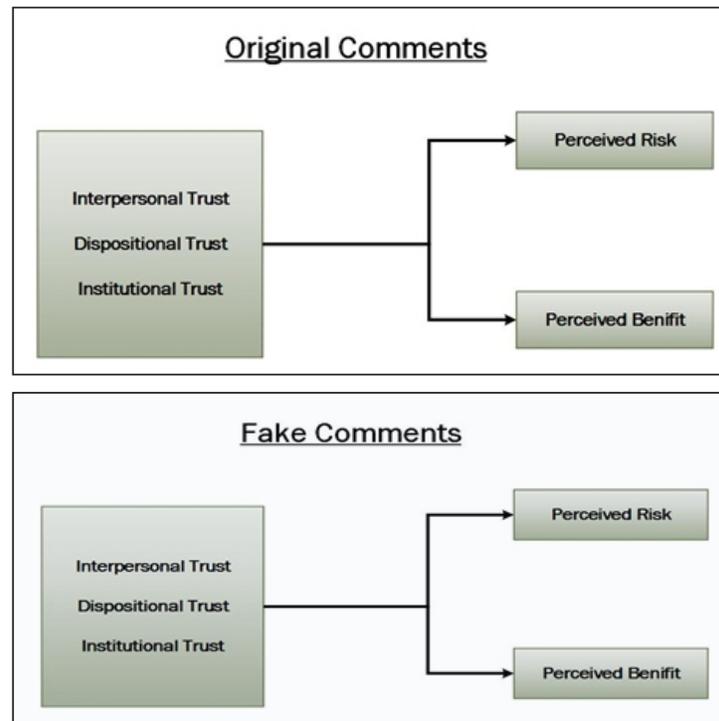
*H4b. Dispositional trust based on original comments has a negative effect on perceived risk.*

*H4c. Institutional trust based on original comments has a negative effect on perceived risk.*

### 3 Theoretical Framework

Online brand comments are trusted by different visitors of that brand page and they make decisions on the basis of those comments or reviews. Based on signalling theory (Bulbulia and Sosis, 2011), online reviews are signalling factors and third party endorsements that might be trusted by a person (Courtney & Li, 2016). Most of previous researchers have taken online reviews as signals for readers, which were based on signalling theory (Eteokleous et al., 2016; Melo et al., 2016; Sparks et al., 2016). However, these signals are not useful unless the receiver considers them trustworthy (Mavlanov et al., 2016). Moreover, Valance theory (Murrell et al., 1970) explains the relationship between consumer behavior, perception of risk and benefit. Valance theory was originated from economics and psychology and later was used in marketing (Peter and Tarpey, 1975). On the basis of valance theory, researchers found that trust affects perceived risk and perceived benefit (Lin et al., 2014).

The model provides a view of the variables included in the project, their mutual relationships and the overall complexity of interconnections between research variables. In this research there are two models. First model contains the relationship between trust (Interpersonal



trust, dispositional trust and institutional trust), perceived risk and perceived benefit. This relationship is based on true comments provided by the participants. However, second model contains the relationship between trust (Interpersonal trust, dispositional trust and institutional trust), perceived risk and perceived benefit. This relationship is based on Fake comments provided by the participants.

## 4 Methodology

### 4.1 Experiment procedure

It is almost impossible to figure out fake comments from Facebook pages. So an experiment was generated to test the hypothesis. In previous studies, experiments were conducted to check online behavior of customers (Tsai et al., 2011). In the current study, a page of Facebook was created containing two mostly used brands among males and females i.e. Shalwar Kameez for female and Kurta Shalwar for males. The products were related to same brand. Both genders were invited to join the page. Page administrator created five seed comments then participants were asked to comment on the brand of their own choice. Comments were distributed in two parts; fake and original on the basis of profile, for example, if a female comments on male focused products that comment was considered as a fake comment, etc. Furthermore, interviews were conducted after experiment to measure the existence of fake identities.

During the interview participants were asked different questions about their Facebook accounts; such as, "Is he or she using more than one Facebook accounts?" "For what purpose does a person usually visit the brand page?"

### 4.2 Study Population

University students make up the largest segment of the SNS user population, with 75% of online adults using SNS (Ellison et al., 2007; Lenhart, 2009). Additionally, males and females age 18 and older are equally likely to use SNSs, with the majority of users having two or more different SNS profile (Lenhart, 2009; Lenhart et al., 2010). Students are said to be demanding consumer population that facilitates the acceptance of social media in an era of consumer control (Mangold and Faulds, 2009). Thus, the use of student sample in this study was deemed appropriate.

Students from two universities including males (from International Islamic University) and females (from Fatima Jinnah University) were taken as sample of current study. 117 female students and 216 male students participated in experiments. 35 percent of total sample was represented by females and 65 percent of sample was represented by males in experiment.

### 4.3 Research tools

Mix strategy was used for collection of data. Questionnaires were distributed among the participants.

Questionnaire contained four items of perceived benefit Adapted from Porter and Donthu (2006), four items of institutional trust were adapted by D Harrison McKnight (2002). Five items scale of dispositional trust and three items scale of interpersonal trust were adapted from the instruments used by Kim et al. (2008), (Walczuch and Lundgren (2004)), Koufaris and Hampton-Sosa (2004) and Jarvenpaa et al. (2000). A four items scale of perceived risk developed by Swaminathan et al. (1999) was used to collect the data.

Data were distributed in two parts based on fake and original comments. Regression was applied to test the model on both sets of data. Impact of trust including dispositional trust, interpersonal trust and institutional trust (independent variables) will be tested on perceived risk and perceived benefit (dependent variables). (Weston, 2001).

#### 4.4 Pilot study

A Facebook page was created containing two products of same brand. One of the items was female specific, i.e. shalwar kameez and second item was male specific, i.e. Kurta Shalwar. Five seed comments on each product were created by the administrator of page. Thirty participants including fifteen male and fifteen females were asked to comment on brand page. To test trust, perceived risk and perceived benefit questionnaires were distributed among the participants. Afterwards interviews were conducted from the participants including following questions.

- Is he/she using more than one Facebook account?
- For what purpose does a person visit brand page? (chatting, information gathering, self-expression)

As per the results of reliability analysis, Chronbach's Alpha for Institutional Trust and Dispositional Trust were 0.708 and 0.719, respectively. Whereas, reliability of Interpersonal Trust was 0.781, for perceived benefit 0.810; similarly, cronbach's alpha for Perceived Risk was 0.795.

## 5 Results

### 5.1 Regression Analysis

#### 5.1.1 Trust and perceived benefit on the basis of fake comments

For the sample of Fake comments regression was run to check the effect of trust (Interpersonal trust, dispositional trust and institutional trust) on perceived benefit. The effects of interpersonal trust have been analyzed on perceived benefits. Results show that R-square = .001; Adj. R Square = -.005. The value of R Square

(.001) shows that approximately 1% variation in perceived benefits was due to interpersonal trust. The F-value is .209. Results revealed a non-significant effect of interpersonal trust ( $\beta = 0.038$ ) on perceived benefits.

The effect of dispositional trust has been analyzed on perceived benefits. Result depicted in Table 1. The result shows that R-square = .092; Adj. R Square = .086. The value of R Square (.092) shows that approximately 9% variation in perceived benefits was due to dispositional trust. The F-value is 14.86. Results revealed a positively significant effect of dispositional trust ( $\beta = 0.303^{**}$ ) on perceived benefits.

The effect of institutional trust has been analyzed on perceived benefits. Result depicted in Table 1. The result shows that R-square = .153; Adj. R Square = .148. The value of R Square (.153) shows that approximately 15% variation in perceived benefits was due to institutional trust. The F-value is 26.62. Results revealed a positively significant effect of institutional trust ( $\beta = 0.39^{**}$ ) on perceived benefits.

### 5.2 Trust and perceived risk on the basis of fake comments

For the sample of Fake comments regression was run to check the effect of trust (interpersonal trust, dispositional trust and institutional trust) on perceived risk.

The effect of interpersonal trust has been analyzed on perceived risk. Result depicted in Table 2. The result shows that R-square = .031; Adj. R Square = 0.024. The value of R Square (.031) shows that approximately 3% variation in perceived risk was due to interpersonal trust. The F-value is 4.65. Results revealed a positively significant effect of interpersonal trust ( $\beta = 0.17^{**}$ ) on perceived risk.

Similarly, the effect of dispositional trust has been analyzed on perceived risk. The results indicate that R-square = .002; Adj. R Square = -.005. The value of R Square (.002) shows that approximately 2% variation in perceived risk was due to dispositional trust. The F-value is .224. Results revealed an insignificant effect of dispositional trust ( $\beta = 0.-.041$ ) on perceived risk.

Moreover, the effect of institutional trust has been analyzed on perceived benefits. The results in table (2) show that R-square = .000; Adj. R Square = -.007. The value of R Square (.000) shows that approximately 00% variations in perceived risk are due to institutional trust. The F-value is .006. Results revealed an insignificant effect of institutional trust ( $\beta = -.006$ ) on perceived risk.

### 5.3 Trust and perceived benefit on the basis of original comments

For the sample of original comments regression was run to check the effect of trust (interpersonal trust, dis-

Table 1: Regression Analysis for Trust & Perceived Benefit (Fake Comments)

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	F	Significance of ANOVA	Beta	Significance of Coefficients
Interpersonal Trust	Received benefits	0.38	0.001	-0.005	0.209	0.648	0.38	0.648
Dispositional Trust	Received benefits	0.303	0.092	0.086	14.862	0.000	0.303	0.000
Institutional Trust	Received benefits	0.392	0.153	0.148	26.622	0.000	0.392	0.000

Table 2: Regression Analysis for Trust & Perceived Risk (Fake Comments)

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	F	Significance of ANOVA	Beta	Significance of Coefficients
Interpersonal Trust	Received Risk	0.175	0.031	0.024	4.655	0.033	0.175	0.033
Dispositional Trust	Received Risk	0.041	0.002	-0.005	0.224	0.662	-0.041	0.662
Institutional Trust	Received Risk	0.006	0	-0.007	0.006	0.938	-0.006	0.938

positional trust and institutional trust) on perceived benefit.

The effects of interpersonal trust have been analyzed on perceived benefits. Result shows that R-square = .147; Adj. R Square = .142. The value of R Square (.147) shows that approximately 15% variation in perceived benefits was due to interpersonal trust. The F-value is 31.272. Results revealed positive significant effect of interpersonal trust ( $\beta = 0.383^{**}$ ) on perceived benefits.

The effect of dispositional trust has been analyzed on perceived benefits. Result depicted in Table 3. The result shows that R-square = .068; Adj. R Square = .062. The value of R Square (.068) shows that approximately 7% variation in perceived benefits was due to dispositional trust. The F-value is 13.19. Results revealed a negatively significant effect of dispositional trust ( $\beta = -0.260^{**}$ ) on perceived benefits.

The effect of institutional trust has been analyzed on perceived benefits. Result depicted in Table 3. The result shows that R-square = .019; Adj. R Square = .013. The

value of R Square (.019) shows that approximately 2% variation in perceived benefits was due to institutional trust. The F-value is 3.498. Results revealed an insignificant effect of institutional trust ( $\beta = 0.137$ ) on perceived benefits.

### 5.4 Trust and perceived risk on the basis of original comments

For the sample of original comments regression was run to check the effect of trust (interpersonal trust, dispositional trust and institutional trust) on perceived risk.

The effect of interpersonal trust has been analyzed on perceived risk. Result depicted in Table 6. The result shows that R-square = .032; Adj. R Square = 0.026. The value of R Square (.032) shows that approximately 3% variation in perceived risk was due to interpersonal trust. The F-value is 5.951. Results revealed a negatively significant effect of interpersonal trust ( $\beta = -0.178^{**}$ ) on

Table 3: Regression Analysis for Trust &amp; Perceived Benefit (Original Comments)

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	F	Significance of ANOVA	Beta	Significance of Coefficients
Interpersonal Trust	Received benefit	0.383	0.147	0.142	31.272	0.000	0.383	0.000
Dispositional Trust	Received benefit	0.026	0.068	0.062	13.199	0.000	-0.026	0.000
Institutional Trust	Received benefit	0.137	0.019	0.013	3.498	0.063	0.137	0.063

Table 4: Regression Analysis for Trust &amp; Perceived Risk (Original Comments)

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	F	Significance of ANOVA	Beta	Significance of Coefficients
Interpersonal Trust	Received Risk	0.178	0.032	0.026	5.951	0.016	0.178	0.016
Dispositional Trust	Received Risk	0.502	0.252	0.248	61.392	0.000	0.502	0.000
Institutional Trust	Received Risk	0.441	0.195	0.19	44.04	0.000	0.441	0.000

perceived risk.

The effect of dispositional trust has been analyzed on perceived risk. Result depicted in Table 4. The result shows that R-square = .252; Adj. R Square = .248. The value of R Square (.252) shows that approximately 25% variation in perceived risk was due to dispositional trust. The F-value is 61.392. Results revealed positively significant effect of dispositional trust ( $\beta = 0.502^{**}$ ) on perceived risk.

The effect of institutional trust has been analyzed on perceived benefits. Result depicted in Table 4. The result shows that R-square = .195; Adj. R Square = .190. The value of R Square (.195) shows that approximately 19% variations in perceived risk were due to institutional trust. The F-value is 44.040. Results revealed a positively significant effect of institutional trust ( $\beta = 0.441^{**}$ ) on perceived benefits.

## 6 Discussion

The results of study were valuable for determining the effect of trust (interpersonal trust, dispositional trust and institutional trust) on perceived risk and perceived benefit. Effect of trust (based on fake IDs) was checked on Perceived risk and perceived benefit. Results show that interpersonal trust does not affect perceived risk or perceived benefits. Similarly, Institutional trust and dispositional trust do not affect perceived risk. However, perceived benefit is positively affected by both institutional and dispositional trust. So H1b and H1c are accepted on the basis of results.

Effects of trust (based on original IDs) was also checked on perceived risk and perceived benefit. Result shows that interpersonal trust positively affects perceived benefit; however, perceived risk is not affected by interpersonal trust, therefore, H3a is accepted. Institutional trust does not affect perceived benefit. However,

perceived risk is positively affected by institutional trust so alternative hypothesis of H4a is accepted. There is a positive effect of dispositional trust on perceived benefit and negative effect on perceived risk leading to the acceptance of H3b and H4b.

Researchers have concluded that reviews and rating on a product by third party plays an important role for the customers to gain information about that particular product. These reviews and rating by third party have decreased the need of customer for gaining information through advertising (Chen and Xie, 2005). Furthermore, brand engagement empowers customers to learn about other products where rating and online reviews are very helpful for them Prahalad and Ramaswamy (2004). So rating and reviews provide effective information for customers (Fuller et al., 2009). Approximately, 83% of Fortune 500 companies use some form of social media to connect and engage with consumers in the marketplace (Naylor et al., 2012). The findings of this study are in line with literature that interpersonal trust has a positive effect on perceived benefit. People heavily rely on reviews and rating of other people while collecting information about a particular product (Malbon, 2013). Furthermore, while having a look on comments it can be observed that if the seed comments are negative then most of comment by other users are negative and vice versa. Therefore, perceived risk of users may increase due to trend of negative comments.

However, many companies use "Push" approach, which creates a negative attitude of company towards social media. Companies need to use different strategies while communicating with customers through social media such as get multidirectional and more conversational. Companies use traditional marketing and advertising approaches which effect the trust of users about what companies are telling them (Gil, 2010). Furthermore, users believe more in third party comments than information provided by companies (Nelson-Field et al., 2012). In another survey that was done by the Kelsey Group (comScore /The Kelsey Group, October 2007) "review users noted that reviews generated by fellow consumers had a greater influence than those generated by professionals". So in online social networks concept of influencers is getting more attraction. A person is no longer influenced by "expert" but also by other influencers such as attractive comments, large network etc. The results of current study are in line with previous research that users perceived risk increases while trusting in institution because of push strategy and traditional advertisement. However, their perceived benefit increases while having conversation with other users, because people believe more in third party comments than information provided by companies.

Researchers have found that in Pakistani culture, risk attitude and perception plays an important role in shaping decision. Generally, tendency of risk aversion is involved while taking decision (Iqbal et al., 2016). Fur-

thermore, effect of internet trust on risk perception and consumer attitude towards internet is positive. Propensity to trust is a determinant not only for interpersonal relationships but also for trust in technological systems (Grabner-Krauter, 2008). Hence, perceived risk of users may increase because of low trust in technological system (i.e. facebook). According to Antony and Lin (2006), online decisions are affected by perceived risk. Furthermore, people were not ready to take any type of opportunity that involves any type of risk (Ellis, 2000). However, in current study dispositional trust of users was tested in context of Facebook as well as brand. Perceived risk of users may increase because of push strategy by companies. Users of social media do not trust in information provided by companies. However, people trust more on the comments provided by their friends or third party with larger network as compared to information provided by company itself (Gil, 2010).

Studies have concluded that fake reviews can mislead users and do not provide an accurate picture of the product (Tsaparas, Ntoulas & Terzi, 2011; Lappas and Gunopulos, 2010). Furthermore, fake reviews mislead readers by writing fake positive or negative opinions to promote or damage reputation (MacDonald, Ounis & Soboroff, 2007; Liu, 2010). So on the basis of fake reviews, a visitor of page may be trusting on negative comments provided by fake ID and that negative comment can increase the risk of visitor. So trust can positively or negatively affect perceived risk or perceived benefit. However, in current study dispositional trust positively affects perceived benefits.

## 7 Conclusion

According to current study people believe more in comments and information provided by their friends or by third party. While getting information from social media users trust in comments and reviews provided by other users without differentiating original and fake comments. Users of Facebook trust in brand but normally ignore information provided by the company itself.

Companies make decisions on the basis of number of likes and shares. However, comments and reviews are being ignored by companies. Comments and reviews play a vital role as feedback for companies. Furthermore, other users of social networking sites are affected by comments and reviews. There are many users of social networking sites, which join social media with fake IDs and post negative comments and reviews just for the enjoyment which effects trust of other people. Results of current study show that perceived benefit and risk of user is affected by interpersonal trust. So those fake comments affect trust of other users.

## 7.1 Implications

Current study will be helpful for managers to make important decisions and increase brand engagement. Furthermore, companies should not go for traditional advertisement while advertising on social media. Study will help companies to communicate with their customers more effectively by viewing comments.

## 7.2 Limitations and future directions

Due to lack of time and resources data were collected from students of two universities. Future research can be conducted by maximizing data including different age groups and professions. A very interesting trend was observed in comments that if the seed comments are positive then most of the following comments by other users are also positive and vice versa. Future research can be conducted on psychology of users towards a brand or a service in social media based on seed comments or comments that are initially viewed by the user.

Due to non-availability of funds current study was conducted based on data collected from universities in Pakistan. However future studies can be conducted for comparison of consumer behavior from different countries.

## References

- Alhakami, A. S. and Slovic, P. (1994). A psychological study of the inverse relationship between perceived risk and perceived benefit. *Risk analysis*, 14(6):1085–1096.
- Anderson, E. W. (1998). Customer satisfaction and word of mouth. *Journal of service research*, 1(1):5–17.
- Ba, S. and Pavlou, P. A. (2002). Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behavior. *MIS quarterly*, pages 243–268.
- Ba, S., Whinston, A. B., and Zhang, H. (1999). Building trust in the electronic market through an economic incentive mechanism. In *Proceedings of the 20th international conference on Information Systems*, pages 208–213. Association for Information Systems.
- Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., and Gosling, S. D. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychological science*, 21(3):372–374.
- Bickart, B. and Schindler, R. M. (2001). Internet forums as influential sources of consumer information. *Journal of interactive marketing*, 15(3):31–40.
- Bilkey, W. J. (1953). A psychological approach to consumer behavior analysis. *Journal of Marketing*, 18(1):18–25.
- Bilkey, W. J. (1955). Psychic tensions and purchasing behavior. *The Journal of Social Psychology*, 41(2):247–257.
- Blau, P. M. (1964). *Exchange and power in social life*. Transaction Publishers.
- Bord, R. J. and O'Connor, R. E. (1990). Determinants of risk perceptions of a hazardous waste site. *Risk analysis*, 12(3):411–416.
- Bord, R. J. and O'Connor, R. E. (1992). Determinants of risk perceptions of a hazardous waste site. *Risk analysis*, 12(3):411–416.
- Bulbulia, J. and Sosis, R. (2011). Signalling theory and the evolution of religious cooperation. *Religion*, 41(3):363–388.
- Castelfranchi, C. (2003). Grounding we-intentions in individual social attitudes. In *Realism in action*, pages 195–212. Springer.
- Chauhan, K., Saji, K., and Pillai, A. (2013). Role of content strategy in social media brand communities: a case of higher education institutes in india. *Journal of Product & Brand Management*, 22(1):40–51.
- Chen, J., Xu, H., and Whinston, A. B. (2011). Moderated online communities and quality of user-generated content. *Journal of Management Information Systems*, 28(2):237–268.
- Chen, Y. and Xie, J. (2005). Third-party product review and firm marketing strategy. *Marketing Science*, 24(2):218–240.
- Coppola, N. W., Hiltz, S. R., and Rotter, N. G. (2004). Building trust in virtual teams. *IEEE transactions on professional communication*, 47(2):95–104.
- D Harrison McKnight, N. L. C. (2002). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International journal of electronic commerce*, 6(2):35–59.
- Donath, J. (2007). Signals in social supernets. *Journal of Computer-Mediated Communication*, 13(1):231–251.
- Ellison, N. B., Steinfield, C., and Lampe, C. (2007). The benefits of facebook friends: social capital and college students use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4):1143–1168.
- Eteokleous, P. P., Katsikeas, C. S., and Leonidou, L. C. (2016). Review of research on csr in international marketing: 1993–2013. In *Lets Get Engaged! Crossing the Threshold of Marketings Engagement Era*, pages 683–684. Springer.
- Flynn, J., Burns, W., Mertz, C., and Slovic, P. (1992). Trust as a determinant of opposition to a high-level radioactive waste repository: Analysis of a structural model. *Risk analysis*, 12(3):417–429.
- Frewer, L. J., Howard, C., and Shepherd, R. (1998). Understanding public attitudes to technology. *Journal of Risk Research*, 1(3):221–235.
- Füller, J., Bartl, M., Ernst, H., and Mühlbacher, H. (2006). Community based innovation: How to integrate members of virtual communities into new product development. *Electronic Commerce Research*, 6(1):57–73.

- Gefen, D., Straub, D. W., and Rigdon, E. E. (2011). An update and extension to sem guidelines for administrative and social science research. *Management Information Systems Quarterly*, 35(2):iii–xiv.
- Grayson, K., Johnson, D., and Chen, D.-F. R. (2008). Is firm trust essential in a trusted environment? how trust in the business context influences customers. *Journal of Marketing Research*, 45(2):241–256.
- Gregory, R. and Mendelsohn, R. (1993). Perceived risk, dread, and benefits. *Risk Analysis*, 13(3):259–264.
- Groothuis, P. A. and Miller, G. (1997). The role of social distrust in risk-benefit analysis: A study of the siting of a hazardous waste disposal facility. *Journal of Risk and Uncertainty*, 15(3):241–257.
- Gummerus, K. S., Coulter, J., Liljander, V., Weman, E., and Pihlström, M. (2012). Customer engagement in a facebook brand community. *Management Research Review*, 35(9):857–877.
- Hajli, M. (2012). An integrated model for e-commerce adoption at the customer level with the impact of social commerce. *International Journal of Information Science and Management*.
- Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International Journal of Information Management*, 35(2):183–191.
- Hoffman, D. L. and Fodor, M. (2010). Can you measure the roi of your social media marketing? *MIT Sloan Management Review*, 52(1):41.
- Ivanov, M. and Ganev, G. (2014). Bulgarian business elite, 1900s–2000s. *The Power of Corporate Networks: A Comparative and Historical Perspective*, 26:213.
- Jarvenpaa, S. L., Tractinsky, N., and Saarinen, L. (1999). Consumer trust in an internet store: a cross-cultural validation. *Journal of Computer-Mediated Communication*, 5(2):0–0.
- Jungermann, H., Pfister, H.-R., and Fischer, K. (1996). Credibility, information preferences, and information interests. *Risk Analysis*, 16(2):251–261.
- Kee, H. W. and Knox, R. E. (1970). Conceptual and methodological considerations in the study of trust and suspicion. *Journal of conflict resolution*, 14(3):357–366.
- Kim, D. J., Ferrin, D. L., and Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision support systems*, 44(2):544–564.
- Kirmani, A. and Rao, A. R. (2000). No pain, no gain: A critical review of the literature on signaling unobservable product quality. *Journal of marketing*, 64(2):66–79.
- Koufaris, M. and Hampton-Sosa, W. (2004). The development of initial trust in an online company by new customers. *Information & management*, 41(3):377–397.
- Kumar, R., Novak, J., and Tomkins, A. (2010). Structure and evolution of online social networks. In *Link mining: models, algorithms, and applications*, pages 337–357. Springer.
- Lappas, T., Sabnis, G., and Valkanas, G. (2016). The impact of fake reviews on online visibility: A vulnerability assessment of the hotel industry. *Information Systems Research*, 27(4):940–961.
- Lee, M. K. and Turban, E. (2001). A trust model for consumer internet shopping. *International Journal of electronic commerce*, 6(1):75–91.
- Lenhart, A. (2009). Teens and sexting. *Pew internet & American life project*, 1:1–26.
- Lenhart, A., Ling, R., Campbell, S., and Purcell, K. (2010). Teens and mobile phones: Text messaging explodes as teens embrace it as the centerpiece of their communication strategies with friends. *Pew Internet & American Life Project*.
- Lewin, K. (1943). Forces behind food habits and methods of change. *Bulletin of the national Research Council*, 108(1043):35–65.
- Lewis, J. D. and Weigert, A. (1985). Trust as a social reality. *Social forces*, 63(4):967–985.
- Liang, T.-P. and Turban, E. (2011). Introduction to the special issue social commerce: a research framework for social commerce. *International Journal of electronic commerce*, 16(2):5–14.
- Lin, J., Wang, B., Wang, N., and Lu, Y. (2014). Understanding the evolution of consumer trust in mobile commerce: a longitudinal study. *Information Technology and Management*, 15(1):37–49.
- Lin, K.-Y. and Lu, H.-P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 27(3):1152–1161.
- Liu, B. (2013). Opinion spam detection: Detecting fake reviews and reviewers.
- Luhmann, N. (1980). Trust: A mechanism for the reduction of social complexity, trust and power.
- Malbon, J. (2013). Online cross-border consumer transactions: A proposal for developing fair standard form contract terms. *Browser Download This Paper*.
- Malhotra, A., Malhotra, C. K., and See, A. (2013). How to create brand engagement on facebook. *MIT Sloan Management Review*, 54(2):18.
- Mangold, W. G. and Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business horizons*, 52(4):357–365.
- Mayer, R. C., Davis, J. H., and Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of management review*, 20(3):709–734.

- Melo, A. J., Hernández-Maestro, R. M., and Muñoz-Gallego, P. A. (2016). Service quality perceptions, online visibility, and business performance in rural lodging establishments. *Journal of Travel Research*, page 0047287516635822.
- Mou, J. and Cohen, J. (2014). Trust, risk barriers and health beliefs in consumer acceptance of online health services.
- Mukherjee, A., Liu, B., and Glance, N. (2012). Spotting fake reviewer groups in consumer reviews. In *Proceedings of the 21st international conference on World Wide Web*, pages 191–200. ACM.
- Murrell, J. N., Kettle, S. F. A., and Tedder, J. M. (1970). Valence theory.
- Nelson-Field, K., Riebe, E., and Sharp, B. (2012). What's not to like?. *Journal of Advertising Research*, 52(2):262–269.
- Nooteboom, B., Berger, H., and Noorderhaven, N. G. (1997). Effects of trust and governance on relational risk. *Academy of management Journal*, 40(2):308–338.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International journal of electronic commerce*, 7(3):101–134.
- Peter, J. P. and Ryan, M. J. (1976). An investigation of perceived risk at the brand level. *Journal of marketing research*, pages 184–188.
- Peter, J. P. and Tarpey, L. X. (1975). A comparative analysis of three consumer decision strategies. *Journal of consumer research*, 2(1):29–37.
- Phua, J. and Ahn, S. J. G. (2014). Explicating the “like” on facebook brand pages: The effect of intensity of facebook use, number of overall “likes”, and number of friends’ “likes” on consumers’ perceived brand outcomes. In *American Academy of Advertising. Conference. Proceedings (Online)*, page 150. American Academy of Advertising.
- Prahalad, C. K. and Ramaswamy, V. (2004). Co-creating unique value with customers. *Strategy & leadership*, 32(3):4–9.
- Qureshi, I. A. and Mir, I. A. (2013). Users perceptions, attitudes and continuance intentions of facebook: Insights from pakistan.
- Racherla, P., Mandviwalla, M., and Connolly, D. J. (2012). Factors affecting consumers’ trust in online product reviews. *Journal of Consumer Behaviour*, 11(2):94–104.
- Richins, M. L. (1984). Word of mouth communication as negative information. *NA-Advances in Consumer Research Volume 11*.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of personality*, 35(4):651–665.
- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American psychologist*, 35(1):1.
- Sako, M. and Helper, S. (1998). Determinants of trust in supplier relations: Evidence from the automotive industry in japan and the united states. *Journal of Economic Behavior & Organization*, 34(3):387–417.
- Sashi, C. (2012). Customer engagement, buyer-seller relationships, and social media. *Management decision*, 50(2):253–272.
- Schau, H. J. and Gilly, M. C. (2003). We are what we post? self-presentation in personal web space. *Journal of consumer research*, 30(3):385–404.
- Siegrist, M. and Cvetkovich, G. (2000). Perception of hazards: The role of social trust and knowledge. *Risk analysis*, 20(5):713–720.
- Sirdeshmukh, D., Singh, J., and Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of marketing*, 66(1):15–37.
- Sjöberg, L. (1998). Risk perception: Experts and the public. *European Psychologist*, 3(1):1–12.
- Smith, D., Menon, S., and Sivakumar, K. (2005). Online peer and editorial recommendations, trust, and choice in virtual markets. *Journal of interactive marketing*, 19(3):15–37.
- Smock, A. D., Ellison, N. B., Lampe, C., and Wohn, D. Y. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers in Human Behavior*, 27(6):2322–2329.
- Sparks, B. A. and Browning, V. (2011). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management*, 32(6):1310–1323.
- Sparks, B. A., Perkins, H. E., and Buckley, R. (2013). Online travel reviews as persuasive communication: The effects of content type, source, and certification logos on consumer behavior. *Tourism Management*, 39:1–9.
- Sparks, B. A., So, K. K. F., and Bradley, G. L. (2016). Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern. *Tourism Management*, 53:74–85.
- Swaminathan, V., Lepkowska-White, E., and Rao, B. P. (1999). Browsers or buyers in cyberspace? an investigation of factors influencing electronic exchange. *Journal of Computer-Mediated Communication*, 5(2):0–0.
- Swamynathan, G., Wilson, C., Boe, B., Almeroth, K., and Zhao, B. Y. (2008). Do social networks improve e-commerce?: a study on social marketplaces. In *Proceedings of the first workshop on Online social networks*, pages 1–6. ACM.
- Tan, Y.-H. and Thoen, W. (2000). A logical model of trust in electronic commerce. *Electronic Markets*, 10(4):258–263.
- Tariq, W., Mehboob, M., Asf, M., and Khan, Y. (2012). The impact of social media and social networks on education and students of pakistan.
- Tosun, L. P. (2012). Motives for facebook use and expressing true self on the internet. *Computers in Human Behavior*, 28(4):1510–1517.

- Tsai, J. Y., Egelman, S., Cranor, L., and Acquisti, A. (2011). The effect of online privacy information on purchasing behavior: An experimental study. *Information Systems Research*, 22(2):254–268.
- Utz, S., Kerkhof, P., and van den Bos, J. (2012). Consumers rule: How consumer reviews influence perceived trustworthiness of online stores. *Electronic Commerce Research and Applications*, 11(1):49–58.
- Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., and Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research*, 13(3):253–266.
- Wang, Z., Tchernev, J. M., and Solloway, T. (2012). A dynamic longitudinal examination of social media use, needs, and gratifications among college students. *Computers in Human Behavior*, 28(5):1829–1839.
- Weisberg, J., Te'eni, D., and Arman, L. (2011). Past purchase and intention to purchase in e-commerce: The mediation of social presence and trust. *Internet research*, 21(1):82–96.
- Wilkie, W. L. and Pessemier, E. A. (1973). Issues in marketing's use of multi-attribute attitude models. *Journal of Marketing research*, pages 428–441.
- Williamson, O. E. (1993). Calculativeness, trust, and economic organization. *The Journal of Law and Economics*, 36(1, Part 2):453–486.
- Zahavi, A. (1975). Mate selectiona selection for a handicap. *Journal of theoretical Biology*, 53(1):205–214.

# Determinants of Facebook Usage in Organizations and its Impact on Job Performance

Ramsha Zakariya\*

Capital University of Science and Technology, Islamabad

---

**Abstract.** Facebook is the most trendy social network to date whose popularity is rising swiftly nowadays in our society. The overall purpose of this research is to evaluate the determinants of Facebook Usage at the work place and its impact on the job performance of the employees. A sample of 250 employees was drawn from Call Centers in Rawalpindi and Islamabad with the purposive sampling technique. Data were analyzed through Pearson correlation, regression analysis and A. F. Hayes macros to measure the results. The findings suggest that Socializing through Facebook is positively associated with job performance while information sharing and self status seeking are not directly associated with job performance. Moreover, a positive association exists between Facebook usage and employees job performance which is shown to mediate the relationship between socializing, information sharing and self status seeking through Facebook and job performance of the employees.

---

## 1 Introduction

The emergence of online social networking is a prompt outcome of the revolution of communication. An online social network site (SNS) is identified as web based service that allows individuals to (a) construct a public or semipublic profile within a bounded system, (b) articulate a list of other users with whom they share a connection, and (c) view and traverse their list of connections and those made by others within the system (Boyd, 2007). Social networks have large range such as Facebook, Twitter, Flickr, etc. that serve the users for different purposes, i.e. sharing content, messages, following topics trends discussed by people across the network, entertainment, etc (Chung et al., 2014). Out of all social networking sites, Facebook is the most popular social network in the world which was designed for building online presence of people. Previous studies suggest that users are attracted to using Facebook, but there are limited studies that address what actually determines the usage of Facebook among different users. The usage of social networks builds up the feelings of social status and self worth among users and hence it affects their behavior (Wilcox and Stephen, 2013).

Significant doubts remain over the business value of public social networks, especially non-business-oriented networks like Facebook. This study attempts to resolve the controversy of whether or not the use of Facebook by employees leads to added value for organizations by examining the determinants of Facebook usage and its effect on job performance. How-

ever, the situation is changing, as the number of business applications available on these sites increases. Social networks may also add significant value to such applications as problem solving, collaboration, knowledge management, information sharing, and collective intelligence (Turban et al., 2011). The social relationships built through social networks also have impact on business relationships (Zhou et al., 2007). Facebook can serve the employees for different purposes, such as it facilitates knowledge sharing through organizations, which is an important part of management practice (Reinholt et al., 2011) through which people can share information with their colleagues, co workers and friends. Such information can be the exchange of work related information, strategic information and industry trends. Sharing of information among workers through social networks facilitates organizational learning; this source is effective from employees stand point as it boosts up the motivation level and creates organizational learning in low budget. (Ribeiro Soriano et al., 2012). The information rich networks improve work performance of employees and quantify its effects on productivity of employees (Wu, 2013).

Motivation theory (Deci & Ryan 1975) explains why users are motivated to use the Facebook as this theory focuses on behavioral aspect of accepting information technology and users can have intrinsic motivation (entertainment, socialization) or extrinsic motivation (for acquiring information and seeking self status). Both the factors affect the motivation to use Facebook.

Even though social networkings usage has fasci-

---

\*Corresponding author.

Email: ramshazakariya@yahoo.com

nated the media considerably for the previous few years, now it has become a subject matter of academic investigation. (Wills and Reeves, 2009); it is the fastest emerging tool in networking that has been attracting the industry as well as academia and continues to grow at a fast pace (Lin and Lu, 2011). Many of the researches on social networking sites from the college student data are not appropriate for the business world. Moreover, Kotlarsky and Oshri (2005) indicate that the prime focus of literature on information systems distributed on global terms has been on technical aspects for the projects of system development and mostly inappropriately addressed behavioral features. In addition, different studies have addressed the usage of Facebook according to demographics, such as use of Facebook by college and university students (Steinfeld et al., 2008) and its usage and effect of age, gender and type of personality in emerging adults (Correa et al., 2010), there are limited studies that have addressed the usage of Facebook by the employed population. This study seeks to study the usage of Facebook by the employees.

Social networking sites are used for different reasons by different types of users. A person's gender, parental educational background, race and ethnicity are all linked with use of social networking sites (Hargittai, 2008). Based on suggestions of the aforementioned study, the current study examines the usage of social networking sites by telecom sector organizations of Pakistan targeting a specific sector having a different background and culture. This study will be conducted in the context of telecom firms as these firms are identified to provide internet access to their employees to accomplish job roles. In this regard, work styles adopted by telecom sector organizations can be identified as group based where employees have a high degree of flexibility in their work and have a high degree of interaction with their work colleagues. The objective of this study is to test the model in Telecom Sector of Pakistan and its implications for this sector and its results can be applicable on other sectors too. This study will survey participants, who are either full- or part time employees, about the Facebook use, its determinants, and job performance.

Pakistan is experiencing an increase in the usage of online social networking (Google Insight). Pakistani users of the social networking site Facebook crossed 10 million, according to Facebook Ads Manager (Source: The Express Tribune) and it is expected to be growing at an accelerating phase over the years 2014 and 2015. However, according to Google Insight, Pakistan has an internet penetration rate of 11 percent. In the current scenario, if we check the theory and literature, we have very little research about the usage of Facebook in business context in Pakistan so this study can fill the gap for research in the rapidly emerging social media and its implications for organizations.

Studying the effect of social networking site use in the workplace on job performance is important for several reasons. First, professionals in charge of human resource departments will benefit from understanding the associations elicited by this study. Understanding relationships between Facebook use in the workplace and job performance can help reveal the underlying rationale for organizations to either allow or disallow the use of Facebook in the workplace. Organizations are searching for available means to increase employees' job performance. If the use of Facebook turns out to be one of these means, organizations will be able to add the use of Facebook in the workplace to their arsenal of practices to enhance job performance. The findings of this study will reveal whether the belief that happy workers work harder holds in the context of social networking site use in the workplace.

It is expected that the findings of this study will provide insight into job related benefits and issues associated with Facebook to allow individuals, organizational leaders, and employees to better understand and utilize online social structures for success. Further, it is expected that the findings of this study will be a source of general guidance in stimulating future research in this area.

## 2 Literature Review

### 2.1 Facebook Usage as a Type of Cyberloafing

Internet usage at the workplace has revolutionized the way work is done to improve work performance in a number of ways. Most of the employees in organizations have access to internet; some of them use it for job accomplishing purposes, others might use it excessively for personal purposes such as personal emailing, social networking such as Facebook, Twitter, etc. and browsing through other non-work related websites. Lim (2002) termed the activity of the usage of organizations' internet resources by the employees for personal purposes during working hours as Cyberloafing.

Different organizations may consider cyberloafing behaviors of employees differently i.e. acceptable or unacceptable in that organization as per their severity. Many organizations render cyberloafing as an insidious issue (Ugrin et al., 2012). Serious cyberloafing such as online gambling and excessive usage of non-work related sites for personal usage consume more time of the employee and hence reduce their productivity and is considered as undesirable behavior at work, while minor cyberloafing acts such as social networking, sending or receiving personal email can be considered as harmless (Blanchard & Henle, 2007), hence it depends upon the type of cyberloafing activity and the organi-

zation to take it as tolerable or not.

The propensity of employees to use organizational internet resources for non work purposes has been increasing with their increased access to internet at workplace. A very common way to Cyberloaf is considered as usage of social networking sites at workplace, which are widely used by millions of people across the world, and becoming a noteworthy part of peoples lives (Cotten 2008). The most popular social networking site capturing the highest proportion of internet usage traffic is the Facebook which was created in 2004 by Mark Zuckerberg, being perceived as a trustworthy SNS by users (Fogel and Nehmad, 2009). Facebook was created for the purpose of socialization among people; it enables interaction and bonding, sharing of information among friends, colleagues and co-workers, or other people who are around. It is the most popular social networking site in Asia, reporting to have approximately 212 million users in Asia (Jenny et al., 2013)

Literature suggests both negative and positive consequences of cyberloafing through social networking such as Facebook with some arguing that it may harm the organizations while others suggesting that it may increase employee performance. It may be considered as wastage of time at work (Malachowski, 2005) and as a workplace deviant behavior caused by counter-productive behavior, which distracts the workers to accomplish their main job roles (Lim, 2002), resulting in decreased productivity and performance of employees (Lieberman et al., 2011). However its positive effects have also been discussed by some authors. Bakker et al. (2004) propose that when employees are exposed to higher job demands, and longer working hours in the push for higher productivity by the employers (Ferreira and Du Plessis, 2009), the employees get emotionally exhausted. Usage of Facebook can be a solution as Lim and Chen (2009) describe that social networking at workplace can reduce stress and relax the employees, breaking their exhaustion. Usage of Facebook can be considered as a recovery for the employee to recharge and energize them to get ready for getting back to work. Furthermore, Lim and Teo (2005) posit that the internet usage has merged the boundaries of workplace and home, allowing employees to transfer additional work to home than the personal tasks to the place of work, so usage of companys internet for social networking can be justifiable, and may be taken as allowing workers some time for making personal calls through companys telecom resources.

The previous researches that consider Facebook usage harmful for the organizations are overemphasizing its negative consequences; this research further argues that using internet at workplace for personal usage could be considered in resource based point of view that emphasizes the motivation, satisfaction, empowerment, development and work life balance of the employees, which captures sustainable competitive ad-

vantage through a skilled and knowledgeable workforce. These skills and knowledge can be learned through usage of Facebook which is considered as minor cyberloafing and is evident in providing a balance between work and family, cutting down stress, developing new ideas and skills through new acquired knowledge and networking (Blanchard & Henle, 2007).

In this era, organizations cant prohibit usage of social networks as all business functions seem to be shaped to some degree by online social networks such as marketing and advertising, recruiting and selecting activities etc (Smith & Kidder, 2010); employees are exposed to these resources to accomplish different tasks such as emailing and researching for information online. Some of them often use IT mechanisms e.g. firewalls and blocking software, employees may still have access to internet and social networking sites (Facebook) through their personal communication devices like laptops, tablets or smart phones. Hence organizations need to decide whether to allow or control and prevent usage of Facebook, as the minor form of cyberloafing (Lim & Teo, 2005), by understanding the determinants and outcomes of using it at workplace. This study further explores the factors that determine Facebook usage by employees at workplace and their effects on the job performance of employees.

## 2.2 Why People Use Facebook at Workplace

As the usage of Facebook has been showing an increasing trend, and is expected to increase, literature suggests different factors that contribute to the usage of Facebook. It is important to identify those factors. The literature shows Facebook facilitates constructing individual relations, enhancing personal linkages, to find people who have alike experiences, arguing common areas of interest, and linking to the friends, far family members and work colleagues (Ferreira and Du Plessis, 2009). Furthermore, the usage of social networks builds up the feelings of social status and self worth among users and consequently affects their behavior (Wilcox and Stephen, 2013). This research sums up the most common factors that influence Facebook Usage in the workplace by employees as Information Sharing, Socialization and Self Status Seeking.

## 2.3 Socializing Through Facebook

Everyday hundreds and millions of people all over the world use Facebook for accessing online social networks for communicating and sharing their experiences with others. It has become an essential instrument for connecting people & sharing information. Facebook helps people in making a profile of themselves in which they can add their personal information and also can upload pictures and videos, thus

these sites help people in sharing their personal information with others (Wilcox and Stephen, 2013), which gives its users an opportunity to share, express, and connect with others. Users can share their interests, their norms, friends, information regarding workplace, etc. (Hugl, 2011), which may have an influence on the business relationships that are informal in nature. Consequently, they prioritize the border notion of social network in order to incorporate personal relationships with government officials & business professionals, also with relatives and with friends (Zhou et al., 2007).

## 2.4 Self Status Seeking Through Facebook

Literature suggests that although there is hot debate on usage of Facebook, still there is less evidence on how individuals use it for the sake of self representation, conveying status and information (Scott, 2014). There are a very few researches on the self expression, presentation and status seeking through Facebook because research on Facebook is only at the surface level, though Facebook acts as a source for individuals to seek self status, self expression, affinity and self monitoring which can have crucial effects on a persons private and professional life (Rosenberg and Egbert, 2011).

It has been stated that informational giving is a phenomenon dominated by status and status seeking, and also that status gushes are more likely to sustain simulated communities than real ones (Lampel and Bhalla, 2007). Status seeking is thereby viewed as a social urge that motivates participants to invest their time and effort in gifting their experience to others regardless of the thought of direct benefit to themselves in return; and is also trustworthy source of enduring participation, ensuring the survival and growth of virtual communities. Alhabash et al. (2014) found out that out of all the reasons of usage Facebook, Self status seeking is one of the most important and strong factor in determining Facebook Usage Intensity.

## 2.5 Information Sharing Through Facebook

With the passage of time, firms have shifted towards the use of web 2.0 as a knowledge sharing tool through which they can perform much better as compared to the performance level measured by using conventional methods. By transcending the approach that knowledge is something to be owned, bought and sold, YouTube, Facebook, Google and many other such sites have ushered in a new age of sharing which has been easily and quickly accepted and embraced by millions. Sharing of information through Facebook such as recipes, travel guides, and weather forecasts, business guides, work related information gathering etc has be-

come a common practice (Belk, 2010). Facebook, providing its users with a number of contacts and having an appeal to the advantages of the variety of information, learning and tactic knowledge, benefits the users in acquiring that information and knowledge on time through their social contacts (Zhou et al., 2007).

## 2.6 How Facebook Usage Affects Job Performance

Organizations have been devoting much attention to how the minor cyberloafing such as using Facebook affects the performance of employees. Theories of performance suggest that performance is a function of ability and motivation and hence it is related to social support. The literature shows that online social networks such as Facebook facilitate constructing individual relations, enhancing personal linkages, to find people who have alike experiences, arguing common areas of interest, and linking to the friends, far family members and work colleagues (Ferreira and Du Plessis, 2009); hence affecting the individual characteristics, motivational factors and emotional states, impacting the job performance (Siu et al., 2013).

Empirical studies suggest that Facebook enhances the skills and abilities of employees that may lead to enhanced performance. The outcomes of a study pointed out that young people who had been using Facebook for more than a year gained greater scores in tests of verbal ability, working memory, and spelling as compared to their peers who had been using it for a shorter time period (Alloway et al., 2013); and these skills can help employees accomplish their tasks in better way. Literature finds that Facebook users have greater tendency to take risk as compared to non users of Facebook (Fogel and Nehmad, 2009), this ability may enhance workers capabilities to perform to changing situations in the organization.

Moreover, Zou and Ingram (2013) did their research by breaking down Job performance into decision-making, creativity, teamwork, and task execution. They found that all those social networks which cross the firms boundaries had actually a positive link with decision-making & creativity, whereas networks within the firm deem to have a positive link with teamwork, & task execution, which consequently improves performance at work. A latest research by Moqbel et al. (2013) is recognized to be the beginning work on the influence of social media use in a firm on the outcomes that are related to job, inclusive of job performance, job satisfaction, & organizational commitment. Predominantly, their conclusions gave assistance & support concerning the positive influence of social media use in firms. Valle et al. (2012) suggest that organizations must use some motivation strategies to retain employees in the organization; usage of social media like Face-

book can be helpful in creating employee satisfaction, which is positively related to job performance (Somers and Casal, 2009).

According to the evidence provided by Coker (2013) from data collected through survey, concluded that browsing internet for something other than work may have positive influence, for the workers, at least, in terms of reinstating concentration of the workers as a result from a nationwide survey found worker perceived productivity benefits. These conclusions recommend that internet browsing other than work related purpose i.e. cyberloafing should not always be considered as negative workplace behavior but may be viewed as another informal break activity, in the same manner stepping outside for a cigarette is accepted or may be a trip to the water cooler.

The literature reviewed proposes the following hypotheses:

*H1. Facebook usage mediates the relationship between socializing and job performance.*

*H2. Facebook usage mediates the relationship between self status seeking and job performance.*

*H3. Facebook usage mediates the relationship between information sharing and job performance.*

## 2.7 Outcomes on Job Performance

Organizations and researchers have a concern with the Job Performance of employees. For the enhancement of job performance, researches have been conducting studies for decades. According to Porter and Lawler (1968) performance is influenced by attitudes. Empirical evidence of Lawler and Porter (1967) showed that satisfaction that is of higher order needs, is closely related to performance. This research focuses on individual needs such as entertainment, socialization and information sharing satisfied through Facebook and its impact on job performance.

## 2.8 Socialization through Facebook and Job Performance

Socialization through social networks such as Facebook creates a sense of humility among individuals, which includes the ability to seek open advice and appreciating other people and sharing their personalities which is a predictor of success and high job performance of employees (Johnson et al., 2011). Prevailing sort of teamwork prioritize social support through informal social networks of employees (Carson et al., 2007), that may be built through Facebook, which depends and counts on employees networks and support that assist them to develop and grow connections with

each other and consequently assists them in socialization within & across teams that successively ends up in a positive team & organizational outcomes. Such as, a capable individual in a team can be fundamental to maximizing social capital resources of the group, through high quality access to formal leaders in some other groups, via informal socializing ties, which were made through social networking (Oh et al., 2004).

Mathieu et al. (2008) argue that the interaction among individuals working together in teams is necessary to meet the individual, team level and organizational performance and suggest future researchers to study the interaction of group members through virtual social networks like Facebook. This study seeks to extend literature in this regard.

*H4. Socialization through Facebook is positively related to Job Performance.*

## 2.9 Self Status Seeking Through Facebook And Job Performance

Essentially based on the term status refers to a subjects comparative standing in a group, which in turn will be essentially based on esteem, integrity, or deference and hence, will be judged by the degree of success of these activities resulting in increasing esteem, integrity, or deference. Status seeking on Facebook or another social network may encompass external or internal goals that are; the subjects might seek status for virtuously economic and social advantage, but might also seek it for internal reasons like psychological and emotional ones. Granting, the two drivers are not mutually exclusive, their dominance will be determined via the nature of the group and social ties involved (Lampel and Bhalla, 2007). Judge and Bono (2001) in the light of theory of core self evaluations found out that self status and self esteem being the indicators of core self evaluations construct predict job satisfaction and performance significantly. Literature suggests that job performance is a function of individuals self concern and self orientation; therefore, self status builds up the relationship of job characteristics and job performance (De Dreu and Nauta, 2009).

Facebook acts as a means to increase self-status, which is related to both higher and increased beginner level of success and steeper job performance trajectories (Judge and Hurst, 2008). Any person with high social rank on a social network presumes to be treated pleasantly by others with whom she or he occupies oneself in economic & social interactions. Any persons professional status may be associated with her or his level of job or the amount of promotions that he or she has earned in his or her professional career. High-status professionals that have proven track records of their performance may have a sensation that they have

already built their capabilities (Sumanth and Cable, 2011). In this conception, an actor is successful because he can draw on the resources controlled by her alters, including information, money, power, and material aid (Borgatti and Foster, 2003) that may enhance individual performance.

*H5. Self Status Seeking through Facebook is positively related to Job Performance.*

## 2.10 Information Sharing and Job Performance

Sharing of information which takes place between individuals is a practice of great relevance which grows connections that will in a result help in giving a positive team & organizational outcomes. Facebook usage helps in distributing different ideas which facilitate and amplify interaction among workers and extended engagement. Generally we can say that information services such as Facebook can be used for extrinsic effective and efficient utility working (Pihlström17 and Brush18, 2008) as sharing information through them leads to generation of innovative ideas which leads to better utilization or organizational resources (Tseng and Huang, 2011).

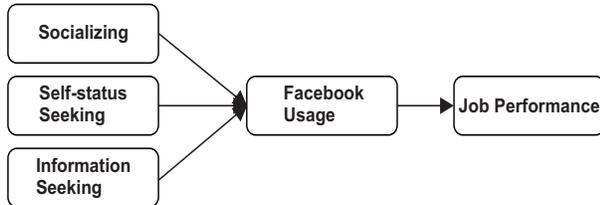


Figure 1: Theoretical framework.

Individual performance in knowledge-intensive work is linked with characteristics of both social connections and networks. Those relationships that cross the firms perimeters, physical obstacles, for example social networks like Facebook, yield distinct & special information & multiple outlooks to persons completing tasks at work (Cross and Cummings, 2004), because recognition and realization of expertise of others can influence performance by enhancing the likelihood of gaining required and appropriate information in order to resolve novel problems.

Sparrowe et al. (2011) studied the effects of both individual and group level social network ties and found that those individuals who are central players in advice gaining and seeking through social networks e.g. Facebook attained higher ratings of performance as opposed to those who hinder flow of information through networks.

*H6. Information Sharing through Facebook is positively related to Job Performance.*

## 3 Methodology

### 3.1 Research Instrument

In the instrument all the items were measured on a five-point Likert scale ranging from 1 = strongly disagree, 2 = disagree, 3 = Neutral, 4 = Agree, 5 = strongly. The scale for Facebook usage comprised of six indicators measuring the use of online social networking developed by Ellison et al. (2007). Value of Cronbachs Alpha was .704, which means that questions for usage of Facebook Usage are reliable. A five item scale developed based on Podsakoff and MacKenzie's (1989) was used to enumerate the job performance of the employees. Value of Cronbachs Alpha was .843, indicating that questions of employee job Performance are reliable. The scale adopted for determinants of Facebook usage had 14 items and the Chronbach alpha was .804.

### 3.2 Population and Sample

Employees of Telecom Sector from Rawalpindi and Islamabad have been targeted in this study. The sample was selected from Call Centers as their employees are well aware of Information Communication Technology, and their job demands access to the internet that may give them access to Facebook at workplace as well, therefore, they can efficiently demonstrate the whole population. Moreover, a majority of call center employees constitute the age group 18-25, the Facebook stats show the majority users also comprise this age group, so choosing a sample from this population for checking the determinants and outcomes of Facebook usage at workplace can be effective. Those call centers where the Facebook has been banned for employees; they were not included in the population.

The sample had been selected through Purposive sampling technique which is a form of non probability sampling, as the data had to be collected from the users of Facebook only, i.e., those employees who dont use Facebook were not included in the research sample.

250 questionnaires had been distributed to 10 different call centers in Rawalpindi and Islamabad out of which 210 had been returned. 9 questionnaires were discarded due to inappropriate response and 201 were used for the study.

### 3.3 Sample Characteristics

The sample consisted of 150 male respondents constituting 74.6% of the sample while female respondents were 51, representing 25.4% of the population. The ratio of females in sample was low because of cultural

Table 1: Means, Standard Deviations and Correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Gender	1.25	0.436										
2 Marital Status	1.14	0.347	.162*									
3 Age	1.5	0.53	0.008	.378**								
4 Qualification	1.93	0.644	0.117	.290**	.322**							
5 Experience	1.72	0.687	-0.013	.310**	.441**	.216**						
6 Type Of Position	1.92	1.074	0.001	.285**	.413**	.339**	.444**					
7 Socializing	3.6318	0.8976	0.007	-0.062	-0.002	.198**	-0.02	0.043				
8 Self Status Seeking	3.4312	0.9631	0.091	-0.011	0.04	.212**	0.029	0.088	.622**			
9 Information Sharing	3.3466	0.8999	0.102	0.021	0.091	.160*	.141*	0.058	.405**	.502**		
10 Facebook Usage	3.568	0.976	0.034	0.009	0.106	0.091	0.091	0.041	.670**	.678**	.408**	
11 Job Performance	3.8587	0.7916	0.055	-0.092	-0.018	-0.01	-0.005	-0.007	.395**	.354**	.207**	.493**

*N=201, \*p<0.05, \*\*p<0.01*

norms of Pakistan where females working in Night Shift are not encouraged and most of the outbound call centers have their operations in Night Shift (working on international projects). 86.1% respondents were single and 13.9% were married.

Table 2: Regression for Outcomes

Predictors	Job Performance		
	$\beta$	$R^2$	$\Delta R^2$
Step 1			
Control variables		0.15	
Step 2			
Socializing	.232**		
Self Status Seeking	0.109		
Information Sharing	-0.025	0.206	.191***

Control Variables: Type of Position, Gender, Marital Status, Qualification, Experience, Age  
*N=201, \*\*\*p<0.01, \*\*p<0.05, \*p<0.10*

The majority belonged to age group 18-25 representing 51.2% of the sample and other age groups 25-34 and 35-44 constituted 47.3 and 1.5% respectively of the sample. 59.7% had bachelor degree, 55.7% had an experience of 1-4 years and the junior staff from sales representatives constituted 43.8 percent of sample fol-

lowing by senior staff which constituted 34.8%.

## 4 Results

Table 1 represents the correlation analysis between the variables. The control variables show negative association with job performance while independent variables (socializing, self status seeking and information sharing) and the mediator (Facebook usage) are significantly and positively correlated with job performance, which support the study hypotheses. Socializing, self status seeking and information sharing are also positively correlated with Facebook usage.

Table 2 indicates the regression results of independent variables and their effect on job performance. A linear regression analysis was conducted to evaluate how well socializing, self status seeking and information sharing predict job performance. The control variables were controlled in the first step and independent variables were added in the second step to check the relationships. Socializing was significantly and positively related to job performance ( $\beta = .232$ ,  $p < 0.05$ ) which supports H4 of the study i.e. socializing through Facebook is positively associated to job performance. Self status seeking ( $\beta = .109$ ,  $p > 0.05$ ) and information seeking ( $\beta = -.025$ ,  $p > .718$ ) were not found to have significant relationship with job performance so H5; self status seeking through Facebook is positively associated to job performance and H6 were rejected.

## 4.1 Mediated Regression Analysis through A. F. Hayes

For mediation analysis, indirect macro developed by A. F. Hayes was used to determine whether the change in the effect of the independent variable, after excluding the mediator in the model, is a significant change or insignificant and therefore whether the mediation effect is statistically significant. This method was to find out whether Facebook usage mediates the relationships between independent variables (socializing, self status seeking and information sharing) and job performance or not. The mediation was run for all the independent variables separately. Results were taken on 95% confidence interval and the number of bootstrap re-samples was 1000.

The control variables were controlled and the analysis was done for H1, checking whether Facebook usage mediates the relationship between socializing and job performance. Results showed that all the paths between socializing to Facebook usage ( $\beta = .75$ ), Facebook usage to job performance (.40) and socializing on job performance (.36) were significant at  $p < 0.01$  and  $t > 2$ . After controlling the mediator (Facebook Usage), the relationship between socializing and job performance has become insignificant at  $p = .17$  ( $p > 0.05$ ) and  $t$  value decreased to 1.37 ( $t < 2$ ) suggesting that the mediating effect of Facebook on the relationship between socializing and job performance exists which validates Hypothesis 1.

For H2, after controlling the control variables, all the paths between self status seeking to Facebook usage ( $\beta = .70$ ), Facebook usage to job performance ( $\beta = .40$ ) and self status seeking to job performance ( $\beta = .29$ ) were significant at  $p < 0.01$  and  $t > 2$ . After controlling mediator effects, the relationship between self status seeking and job performance became insignificant representing a  $p$  value of .71 ( $p > 0.05$ ) and  $t$  value decreased to .36 ( $t < 2$ ) indicating that Facebook usage acts as a mediator between self status seeking and job performance, and hence H2 is accepted.

For H3, after controlling effect of control variables, all the paths between information sharing to Facebook usage ( $\beta = .43$ ), Facebook usage to job performance ( $\beta = .40$ ) and self status seeking to job performance (.29) were significant at  $p < 0.01$  and  $t > 2$ . After controlling mediator effects, the relationship between information sharing and job performance became insignificant representing a  $p$  value of .88 ( $p > 0.05$ ) and  $t$  value as .13 ( $t < 2$ ) indicating that Facebook usage acts as a mediator between self status seeking and job performance, and hence H2 is accepted.

Results indicate that H1, H2, H3 and H4 are accepted while H5 and H6 have been rejected.

## 5 Discussion

The goal of this study was testing a research model explaining the expected connection between determinants of Facebook usage and their consequent effect on job performance of the employees. From a theoretical point of view, this study contributes to the Facebook Usage at workplace and job performance literature. This is the first study that addresses the reasons that why employees use Facebook at workplace and how does it affect their job performance.

In general, a good support was found for most of the study's hypotheses. The hypothesis that examined the relationship between socializing and job performance was accepted, in line with the previous studies (Carson et al., 2007; Johnson et al., 2011; Mathieu et al., 2008) suggesting that socializing through Facebook is associated to job performance and it can lead to enhanced employee performance. Pakistan is considered to be having collectivist culture (Hofstede, 1980) where people like to build ties and connections with others, which gives them a feeling of contentment. Facebook can serve employees with a way to socialize with friends, family members, and fellow coworkers and to keep up-to-date with what is going on in their social networks. This sense of social interaction has the potential to positively influence employees productivity with their jobs. This is because online Facebook usage in the workplace provides employees with a sense of social interaction. This social interaction serves as a social resource for employees in the organization which, in turn, enhances employees affective attachment to their organizations. In other words, engaging in social networking through Facebook may increase an employees access to support and resources, resulting in feelings of wanting to stay with the organization and working with full potential to attain organizational goals by performing the job roles better.

The mediation of Facebook usage between socializing through Facebook and job performance has been proved through results supporting literature e.g. Wilcox and Stephen (2013). Employees fulfill their need for socialization with others by using Facebook, the more socialization with others through Facebook they need, the more intense will be their Facebook usage, which makes them build relationships and ties and keeps them connected with others inside and outside the workplace and hence it enhances their job performance.

The hypothesis examining the relationship between self status seeking and job performance was rejected which indicates that the performance of employees will not be enhanced by increased self status through Facebook and this finding was contradictory to previous findings such as De Dreu and Nauta (2009) and Judge and Bono (2001). One of the reasons can be people in Pakistani context don't develop their self sta-

Table 3: Mediated Regression Analysis through A. F. Hayes

	Coeff	SE	t	p	R2	Adj.R2	F	df1	df2	Data	Boot
S_M to FBU_M	0.75	0.05	13	0							
SS_M to FBU_M	0.7	0.05	13	0							
IS_M to FBU_M	0.43	0.07	5.9	0							
Direct Effects of FBU_M on JP_M	0.4	0.06	7.2	0							
Total Effect of S_M on JP	0.36	0.06	6.1	0							
Total Effect of SS_M on JP_M	0.29	0.06	5.3	0							
Total Effect of IS_M on JP_M	0.18	0.06	2.9	0							
Direct Effect of S_M on JP	0.1	0.08	1.4	0.2							
Direct Effect of SS_M on JP_M	0.02	0.07	0.4	0.7							
Direct Effect of IS_M on JP_M	0.01	0.06	0.1	0.9							
Fit Static for S_M Model					0	0.3	0.23	8.6	8	192	
Fit Static for SS_M Model					0	0.3	0.22	8.4	8	192	
Fit Statistic for IS_M Model					0	0.3	0.22	8.3	8	192	
		0.05								0.3	0.2
Indirect Effects of S_M on JP through FBU_M											
		0.05								0.3	0.3
Indirect Effects of SS_M on JP_M through FBU_M											
		0.03								0.2	0.2
Indirect Effects of IV on DV through FBU_M											
Confidence Intervals:											
		95%									
Number of Bootstrap Resamples:		1000									

tus to enhance their performance rather they might be trying to develop their self status for other purposes such as to get recognition, to get respect from others and to develop self esteem and self actualization. As Lampel and Bhalla (2007) suggest that developing self status through Facebook or other networks can have

two types of motives, internal or external. The internal motives might seek to psychological or emotional goals while external goals like economic, monetary and social advantage. This study suggests that people in Pakistan develop self status through Facebook not for the external (monetary) goals, rather they seek emotional

and psychological state of well being for developing their status. This can have indirect effects on enhancing job performance of the employees, though the direct effects have not been observed.

Results indicate that Facebook usage mediates the relationship between self status seeking and job performance. This is an interesting finding indicating that if employees use Facebook more i.e. the intensity of using Facebook will be more for fulfilling the need of self status seeking, then it will lead to increased performance. The findings suggest a significant relationship between self status seeking and Facebook usage, which means people try to develop their self status by using Facebook and the more is their urge for developing their status, the more their Facebook Usage will be. As [Lampel and Bhalla \(2007\)](#) suggest that the type of social ties and nature of interaction determine that a person will try to develop which kind of self status, external or internal. The social ties will be strong when Facebook usage intensity will be more and there will be increased interaction among people that may allow them to develop their status for either external or internal goals. Seeking self status for external motives (economic and monetary) may directly lead to enhanced performance of the employees, which gives them economic benefits, hence the findings of this study support previous findings that job performance will be enhanced by developing self status by using Facebook ([Borgatti and Foster, 2003](#); [Judge and Hurst, 2008](#)).

The hypothesis examining the relationship between information sharing through Facebook and job performance is found to be rejected in this study, which contradicts previous literature such as [Sparrowe et al. \(2011\)](#) who studied direct relationship of information sharing through networks and job performance of employees. The reason of this result can be that individuals may not be able to access accurate, valid and reliable information on Facebook. Some of them may find information from others that is incorrect or inadequate to act upon. As everyone expresses information according to their own knowledge and experience, the information acquired may not always be valid for every kind of context and situation. For example if some employees have interaction with each other on Facebook, having different experiences and working context, the factors that have led to ones success in a particular context may not be able to contribute to enhance the performance of the other in another context. Another reason may be the communication barrier between the people communicating through Facebook. A simple Facebook message or information provided on a Facebook page may not be enough to convey the whole idea to others. Some information needs to be properly disseminated through verbal and non verbal channels. Another reason seems to be the diversified information on Facebook, in such an environment where there is a lot of information through different sources, one may not be

able to identify wrong vs right and effective vs ineffective information that may lead to increased confusion and hence it may not contribute to developing the performance of the employee.

However, findings suggest that Facebook usage mediates the relationship between information sharing and job performance, and are supported by literature ([Zhou et al., 2007](#)). Information sharing is significantly related to Facebook usage which means people who seek to share with or acquire information from others may use Facebook intensely. In simple words, employees who need to share information through Facebook will use Facebook more. Using Facebook more will lead them to gather a lot of information and if that information will be used effectively in proper direction, it may lead to enhanced performance. When Facebook usage will be more, employees will be able to judge the right vs wrong and effective vs ineffective information because they will be having access to more sources of information and knowledge. For effective sharing of information, there should be effective usage intensity of Facebook that can help employees to collect different ideas and knowledge out of which they can screen the ideas that are best suited in their working context and in this way it will lead to increased employee performance.

The findings of this study show significant direct effect of Facebook usage on job performance indicating that there is direct effect of Facebook usage on job performance, contradicting some studies of past ([Lieberman and Miller, 2011](#); [Lim, 2002](#); [Malachowski, 2005](#)) while supporting some other studies ([Alloway et al., 2013](#); [Bakker et al., 2004](#); [Somers and Casal, 2009](#)). The results of the current study suggest that Facebook in the workplace can work as an effective mechanism in boosting the performance of employees. In the model, there is significant total effect of Facebook usage on job performance of employees; hence organizations can use it as a tool for enhancing the job performance by allowing its usage at the workplace.

## 5.1 Implications

This study adds to the emerging body of knowledge which examines the role of Facebook Usage in the workplace on job performance and finds out its determinants that constitute its usage at workplace. The changes in the way people communicate and connect with each other and in the nature of work, as a result of globalization and technological advances have elevated the importance of studying the effect of Facebook usage in the workplace. This study makes a unique contribution to the management information systems and human resource fields, in particular, and to international business, in general, by considering the relationship of Facebook usage in the workplace to job performance of employees from the Call Center industry

that has very emerging effects in the Telecom Sector of Pakistan.

This study is an attempt to fill the gap in the social networking site literature by collecting data from employees in the workplace. Overall, the study has provided support for several unique relationships and thus makes important contributions to the literature. The results suggest that, in order to obtain better work-related outcomes and job performance, employees should involve themselves in Facebook usage as a main source of social support. Establishing a social network with people from different backgrounds through social networking sites would help employees become happier at work, become more innovative, share more ideas, feeling recognized and perform better. In sum, this study suggests that organizations should add the adoption of the use of Facebook in the workplace to their arsenal of practices that enhance organizational commitment and job performance.

## 5.2 Limitations and Future Directions

No empirical study is without limitations. One of the limitations of this study is its reliance on self-reported measurements. For example, since the use of social networking sites in the workplace is sometimes frowned upon and reporting not using it intensely at work would be viewed as a desirable behavior of employees, individuals self-assessment of their social networking site in the workplace may be subject to social desirability bias, presenting ones self in a favorable image. The composition of the sample is another limitation of this study. In particular, the sample collected data from only one particular industry i.e. telecom sector and it included a small number of observations from women as most of the respondents in our sample were men thus limiting the ability to generalize the findings. Another limitation of this study comes from the fact that the data collected were from only two cities of Pakistan. Therefore, caution is advised in making generalizations from the findings of this study. This study is a cross-sectional research design which makes it difficult to determine causality. This discussion, therefore, concludes that future studies greatly need to establish the causality with longitudinal designs. Furthermore, it focused on three main determinants of Facebook usage in organizations, there could be other determinants as well.

The results of this study have several implications for academics and practitioners. Future studies can explore what Facebook usage in the workplace will bring on other job outcomes such as reduced stress and burnout etc. Future studies can study other determinants of Facebook usage at workplace. Further studies can also evaluate the comparison between the positive and negative impacts of Facebook Usage at the workplace. Furthermore it can be investigated which

variable moderates these relationships. This study collected cross-sectional data at a single point in time through a one-time issuance of the survey instrument. To more holistically explore the relationship between online social networking site and its association with work-related outcomes including job performance, a longitudinal study design is worth investigating. This longitudinal study would allow researchers to better track the growth of participants use of social networking sites which in turn could offer greater insight into the association between social networking use and job performance.

## References

- Alhabash, S., Chiang, Y.-h., and Huang, K. (2014). Mam & u&g in taiwan: Differences in the uses and gratifications of facebook as a function of motivational reactivity. *Computers in Human Behavior*, 35:423–430.
- Alloway, T. P., Horton, J., Alloway, R. G., and Dawson, C. (2013). Social networking sites and cognitive abilities: Do they make you smarter? *Computers & Education*, 63:10–16.
- Bakker, A. B., Demerouti, E., and Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human resource management*, 43(1):83–104.
- Belk, R. (2010). Sharing. *Journal of consumer research*, 36(5):715–734.
- Borgatti, S. P. and Foster, P. C. (2003). The network paradigm in organizational research: A review and typology. *Journal of management*, 29(6):991–1013.
- Boyd, D. (2007). m., & ellison, nb (2007). *Social network sites: Definition, history, and scholarship*. *Journal of Computer-Mediated Communication*, 13(1):11.
- Carson, J. B., Tesluk, P. E., and Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of management Journal*, 50(5):1217–1234.
- Chung, S., Lee, K. Y., and Choi, J. (2014). Exploring digital creativity in the workspace: The role of enterprise mobile applications on perceived job performance and creativity. *Computers in Human Behavior*, 42:93–109.
- Correa, T., Hinsley, A. W., and De Zuniga, H. G. (2010). Who interacts on the web?: The intersection of users personality and social media use. *Computers in Human Behavior*, 26(2):247–253.
- Cross, R. and Cummings, J. N. (2004). Tie and network correlates of individual performance in knowledge-intensive work. *Academy of management journal*, 47(6):928–937.
- De Dreu, C. K. and Nauta, A. (2009). Self-interest and other-orientation in organizational behavior: implications for job performance, prosocial behavior, and personal initiative. *Journal of Applied Psychology*, 94(4):913.

- Ellison, N. B., Steinfield, C., and Lampe, C. (2007). The benefits of facebook friends: social capital and college students use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4):1143–1168.
- Ferreira, A. and Du Plessis, T. (2009). Effect of online social networking on employee productivity. *South African Journal of Information Management*, 11(1):1–11.
- Fogel, J. and Nehmad, E. (2009). Internet social network communities: Risk taking, trust, and privacy concerns. *Computers in human behavior*, 25(1):153–160.
- Hargittai, E. (2008). Digital na (t) ives? variation in internet skills and uses among members of the net generation. *Sociological inquiry*, 80(1):92–113.
- Hugl, U. (2011). Reviewing person's value of privacy of online social networking. *Internet Research*, 21(4):384–407.
- Jenny, W., Lin, C.-F. C., Wei-Chieh, W. Y., and Emily, W. (2013). Meaningful engagement in facebook learning environments: Merging social and academic lives. *Turkish Online Journal of Distance Education*, 14(1).
- Johnson, M. K., Rowatt, W. C., and Petrini, L. (2011). A new trait on the market: Honesty–humility as a unique predictor of job performance ratings. *Personality and Individual Differences*, 50(6):857–862.
- Judge, T. A. and Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability with job satisfaction and job performance: A meta-analysis. *Journal of applied Psychology*, 86(1):80.
- Judge, T. A. and Hurst, C. (2008). How the rich (and happy) get richer (and happier): relationship of core self-evaluations to trajectories in attaining work success. *Journal of Applied Psychology*, 93(4):849.
- Kotlarsky, J. and Oshri, I. (2005). Social ties, knowledge sharing and successful collaboration in globally distributed system development projects. *European Journal of Information Systems*, 14(1):37–48.
- Lampel, J. and Bhalla, A. (2007). The role of status seeking in online communities: Giving the gift of experience. *Journal of Computer-Mediated Communication*, 12(2):434–455.
- Lawler, E. E. and Porter, L. W. (1967). Antecedent attitudes of effective managerial performance. *Organizational behavior and human performance*, 2(2):122–142.
- Liberman, B., Seidman, G., McKenna, K. Y., and Buffardi, L. E. (2011). Employee job attitudes and organizational characteristics as predictors of cyberloafing. *Computers in Human Behavior*, 27(6):2192–2199.
- Lieberman, A. and Miller, L. (2011). *Teacher leadership*, volume 17. John Wiley & Sons.
- Lim, V. K. (2002). The it way of loafing on the job: cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior*, 23(5):675–694.
- Lin, K.-Y. and Lu, H.-P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 27(3):1152–1161.
- Malachowski, D. (2005). Wasted time at work costing companies billions. *San Francisco Chronicle*, 11.
- Mathieu, J., Maynard, M. T., Rapp, T., and Gilson, L. (2008). Team effectiveness 1997–2007: A review of recent advancements and a glimpse into the future. *Journal of management*, 34(3):410–476.
- Oh, H., Chung, M.-H., and Labianca, G. (2004). Group social capital and group effectiveness: The role of informal socializing ties. *Academy of management journal*, 47(6):860–875.
- Pihlström, M. and Brush, G. J. (2008). Comparing the perceived value of information and entertainment mobile services. *Perceived Value of Mobile Service Use and Its Consequences*, page 204.
- Porter, L. W. and Lawler, E. E. (1968). Managerial attitudes and performance.
- Reinholt, M., Pedersen, T., and Foss, N. J. (2011). Why a central network position isn't enough: The role of motivation and ability for knowledge sharing in employee networks. *Academy of Management Journal*, 54(6):1277–1297.
- Ribeiro Soriano, D., Assis-Dorr, H., Palacios-Marques, D., and Merigó, J. M. (2012). Social networking as an enabler of change in entrepreneurial brazilian firms. *Journal of Organizational Change Management*, 25(5):699–708.
- Rosenberg, J. and Egbert, N. (2011). Online impression management: Personality traits and concerns for secondary goals as predictors of self-presentation tactics on facebook. *Journal of Computer-Mediated Communication*, 17(1):1–18.
- Scott, G. G. (2014). More than friends: Popularity on facebook and its role in impression formation. *Journal of Computer-Mediated Communication*, 19(3):358–372.
- Siu, O.-I., Lu, C.-q., and Spector, P. E. (2013). Direct and indirect relationship between social stressors and job performance in greater china: The role of strain and social support. *European Journal of Work and Organizational Psychology*, 22(5):520–531.
- Somers, M. J. and Casal, J. C. (2009). Using artificial neural networks to model nonlinearity: The case of the job satisfaction–job performance relationship. *Organizational Research Methods*, 12(3):403–417.
- Sparrowe, R. T., Liden, R. C., Wayne, S. J., and Kraimer, M. L. (2011). Social networks and the performance of individuals and groups. *Academy of management journal*, 44(2):316–325.
- Steinfeld, C., Ellison, N. B., and Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, 29(6):434–445.

- Sumanth, J. J. and Cable, D. M. (2011). Status and organizational entry: How organizational and individual status affect justice perceptions of hiring systems. *Personnel Psychology*, 64(4):963–1000.
- Tseng, S.-M. and Huang, J.-S. (2011). The correlation between wikipedia and knowledge sharing on job performance. *Expert systems with applications*, 38(5):6118–6124.
- Turban, E., Bolloju, N., and Liang, T.-P. (2011). Enterprise social networking: Opportunities, adoption, and risk mitigation. *Journal of Organizational Computing and Electronic Commerce*, 21(3):202–220.
- Ugrin, J. C., Odom, M. D., Pearson, J. M., and Bahmanziari, T. R. (2012). Exploring the effects of social exchange relationships on the scholarly productivity of new faculty members in accounting. *American Journal of Business Education (Online)*, 5(4):385.
- Valle, M. A., Varas, S., and Ruz, G. A. (2012). Job performance prediction in a call center using a naive bayes classifier. *Expert Systems with Applications*, 39(11):9939–9945.
- Wilcox, K. and Stephen, A. T. (2013). Are close friends the enemy? online social networks, self-esteem, and self-control. *Journal of Consumer research*, 40(1):90–103.
- Wills, D. and Reeves, S. (2009). Facebook as a political weapon: Information in social networks. *British Politics*, 4(2):265–281.
- Wu, L. (2013). Social network effects on productivity and job security: Evidence from the adoption of a social networking tool. *Information systems research*, 24(1):30–51.
- Zhou, L., Wu, W.-p., and Luo, X. (2007). Internationalization and the performance of born-global smes: the mediating role of social networks. *Journal of international business studies*, 38(4):673–690.
- Zou, X. and Ingram, P. (2013). Bonds and boundaries: Network structure, organizational boundaries, and job performance. *Organizational behavior and human decision processes*, 120(1):98–109.

# The Impact of Corporate Governance on the Financial Distress: Evidence from Pakistani Listed Companies

Ahmed Hassan Jamal\*, Syed Zulfiqar Ali Shah

*International Islamic University, Islamabad*

---

**Abstract.** This study intends to assess how corporate governance affects the financial distress in non-financial listed companies in Pakistan. Sample of 53 companies was obtained from non-financial institutes listed in Pakistani stock exchange. Regression analysis is used to estimate the impact of explanatory variables including size of board, composition of board, audit committee independence and duality of CEO on the financial distress. The findings show that size of board, composition of board and CEO duality has a positive impact on Z-score of Pakistani listed firms. This implies that better the corporate governance practices in companies, lower will be the financial distress and vice versa.

---

## 1 Introduction

There has been a debate whether the corporate governance practices play a role in generating the financial returns to the owners and the other stakeholders (Parker et al., 2002). It also includes the ability of the firm to survive and revive from the times of financial distress. Hence, it has been an area of interest to understand whether the corporate governance practices impact the organizational ability to confront the period of financial distress.

Various studies in the past have found out that the attributes of corporate governance are having an association with the financial distress (Datta and Datta, 1995; Elloumi and Gueyie, 2001; Gilson, 1989). Corporate governance is defined a set of policies and regulations designed to direct and control the company (Cadbury Report, 1992). Prime objective of corporate governance is to serve the shareholders in the best way possible (Wajid and Shah, 2017). Hence, it can be said that better corporate governance will allow the companies to provide better strategic decision making and to reduce the state of financial distress within itself. Corporate governance includes overall code of corporate governance, policies and procedures for corporate reporting and mechanism for internal and external audit needs, in order to keep an independent observance on the method and affairs of the company and it is thought that this in turn will enhance the financial performance of the entity in short term, as well as the market value of shares of the company in the long term. It is therefore important to explore the impact that is exerted by the corporate governance practices in the period of fi-

ancial distress. However, in this study the main area of concern will be the board's structure.

On the other hand, financial distress is a term that is used in negative connotation to express the financial position of an entity. Financial distress is often described in terms of default, failure, bankruptcy and unsuccessfulness of meeting financial objectives.

This study intends to identify and examine the relationship of the corporate governance practices on the financial distress faced by various Pakistani listed companies. This study will check the impact of different corporate governance practices individually on the financial distress of Pakistani listed companies. The current study is significant as hardly such study has been conducted among Pakistani listed companies. Furthermore, it aims to explore the impact of specific elements board's structure on the financial distress faced by Pakistani listed companies.

## 2 Literature Review

Li et al. (2008) found a negative relationship between the factors of corporate governance like board size, board composition and duality of CEO with the financial distress in the company. Lee and Yeh (2004) tested the association between corporate governance and financial distress in the Taiwanese context. They concluded that the probability of financial distress increases in the companies having weaker corporate governance practices.

Simpson and Gleason (1999) studied the relationship between board structure, ownership, and the fi-

---

\*Corresponding author.

Email: hassan.jamal@aiou.edu.pk

financial distress in the banking industry. The results showed that probability of financial distress is lower when the Chairman and the CEO is one person. However, other factors of corporate governance were found insignificant in the study.

Hassan Al-Tamimi (2012) tested the relationship between the corporate governance and the financial distress on the UAE banks. He found out that there is a significant positive relationship between corporate governance and the level of financial distress. But he further argued that corporate governance in the UAE banks is not good enough. Elloumi and Gueyie (2001) studied the similar relationship and reported that inclusion of outside directors is a key factor in reducing the financial distress of an organization. He argued that the inside directors lack objectivity and independence. Hence, they don't always make decisions that are in the best interest of the shareholders. However, their study failed to find a relationship between the CEO duality and the financial distress.

Parker et al. (2002) also studied the role of corporate governance in increasing the likelihood of survival at the times of financial distress. They also argued that the corporate governance attributes influence the situation of financial distress in an organization.

Muranda (2006) studied that influence of corporate governance on financial distress on the financial sector of Zimbabwe. He argued that weaker boards tend to lead to weak internal system which in turn plays a significant role in increasing the financial distress in an organization. He also pointed out that corporate governance is not only a moral concept but an obligatory matter as well. Hence, the regulators must ensure the compliance on corporate governance requirements that may lead the firm to have strong decision making and vision at the times of financial distress.

Li et al. (2008) studied the relationship of independent board and agency cost on the financial distress in the Chinese listed companies. He assessed 404 Chinese listed companies for a period from 1998 to 2008. The results of his study were similar to the previous studies. He found out that agency cost and independent boards have a negative impact on probability of financial distress in Chinese listed companies. This means that the firms having the higher proportion of independent directors in their board have lesser probabilities of financial distress.

## 2.1 Hypotheses Development

### 2.1.1 Board Size and Financial Distress

Independent directors increase the experience level and the knowledge level in to the firm's board and hence strategic decision making of the company is significantly enhanced (Hillman and Dalziel, 2003). It is therefore argued that higher the board's size so will

be the experience level and the education level in the board, which means that such firms have better capacity to make better strategic level decisions, consequently allowing the companies to gain competitive advantage in the industry. It is therefore believed that probability of financial distress is lesser in firms having larger board size compared to the firms having lower board size. Based on the above arguments, we construct the following hypothesis:

*H1. Larger board size negatively affects the financial distress of a company*

### 2.1.2 Duality and Financial Distress

Often when CEO of an organization is not able to perform as per the expectations of the company's board, the board has two options either to demote the CEO of the company or dismiss them. In case of financial distress or when CEO is unable to meet the expected performance, the evidence is more in support of dismissal of the CEO (Bhagat et al., 1999; Weisbach, 1988). In stronger boards, there is a split between the post of chairman and the CEO so that CEO can put his concentration purely on the operations and activities of the company rather than the rules and regulation issues (Malette and Fowler, 1992). This in turn helps the companies to increase their performance and such companies are less likely to face the financial distress level. Hence, we propose the following hypothesis:

*H2. CEO/Chairman duality has negative relationship with financial distress*

### 2.1.3 Composition of Board and Financial Distress

In order to have better strategic decision making and management, shareholders desire more non-executive directors in the board than the executive directors (Weisbach, 1988). This helps the companies to focus their decisions in the best interests of the shareholders and agency problem can be avoided. Boards having higher proportion of non-executive directors are keen to take aggressive decisions in case of bankruptcy or poor performance, such as change of CEO, as their prime focus is to make decisions in the best interest of the shareholders rather than for the benefit of few key management individuals (Shivdasani, 2004). Such companies hence are more determined to operate smoothly and they plan well to avoid any situation of financial distress that may lead to a poor public image of the company. Therefore, following hypothesis has been developed:

*H3. Higher proportion of the non-executive directors in the board will lead to lower financial distress in the company*

### 2.1.4 Audit Committee Independence and Financial Distress

Shareholders desire to have more independent directors in the company’s board as compared to the executive directors so that the company can operate in the best interests of shareholders (Weisbach, 1988). Audit committee is one of the key committees that works under the board. Hence, it is ideal for the companies to have higher percentage of independent directors in the audit committee so that internal and external audit activities can be directed in the possible way. Moreover, there is higher chance that any adverse situation will be foreseen at appropriate times and the company can take timely steps to avoid any situation of financial distress. Therefore, we propose as follows:

*H4. Higher percentage of independent directors in the audit committee will impact negatively to the financial distress level*

## 3 Theoretical Framework

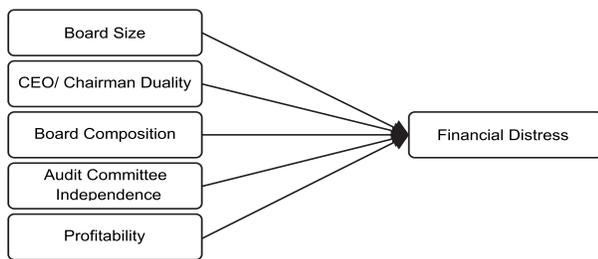


Figure 1: Theoretical framework.

## 4 Methodology

### 4.1 Sample and Procedure

The sample of the study consisted of 53 companies listed at Karachi stock exchange. Five years data were analyzed from 2010 to 2014. The general statistical model for the study is given as follows:

$$FD_{it} = \alpha + \beta_1(BZ)_{it} + \beta_2(BC)_{it} + \beta_3(DUAL)_{it} + \beta_4(ACI)_{it} + \beta_5(PROF)_{it} + \varepsilon_{it}$$

where

*FD* = Financial Distress

*BZ* = Size of Board

*BC* = Composition of Board

*DUAL* = Duality amongst CEO and Chairman

*ACI* = Audit Committee Independence

*PROF* = Profitability

$\varepsilon$  = Error term

## 4.2 Measure of Variables

### 4.2.1 Board Size

Board size can be defined as the numerical strength of the company’s board. Researchers argued that larger board size is likely to affect the business performance (Abor, 2007). Therefore, we have calculated board size as the natural log of total number of board members.

### 4.2.2 Board Composition

It is measured as the proportionate number of non-executive directors compared to the total board members. It is therefore calculated by dividing the number of non-executive directors with the total number of board members.

### 4.2.3 Audit Committee Independence

Audit committee independence shows the representative in the audit committee that is non-executives. Hence, it is calculated as the ratio of number of non-executive directors in the audit committee to the total number of directors in the audit committee.

### 4.2.4 CEO/Chairman Duality

To capture the effect of CEO/ Chairman Duality, we have used a Dichotomous variable in our research. Value “1” is given for the boards having different post for the CEO and the Chairman; otherwise the value is zero.

### 4.2.5 Profitability

Profitability is the controlled variable in the study. It is calculated through return of assets.  
 $ROA = \text{Profit After Tax} / \text{Total Assets}$

### 4.2.6 Financial Distress

Altman, Z-score has been used as a proxy for the financial distress as Z-score model is considered as one of the most frequently used models for early prediction of financial distress (Yi, 2012). The original model introduced by Altman (1968) as a predictor of financial distress, and the score can be computed as follows:

$$Z - \text{Score} = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$$

where

$X_1$  = Working Capital/Total Assets

$X_2$  = Retained Earnings/Total Assets

$X_3$  = Earnings before Interest and Taxes/Total Assets

$X_4$  = Market Value of Equity/Book Value of Total Debt

$X_5$  = Sales/Total Assets

It should be noted that there is a negative relationship between the calculated value of Z-Score and the

Table 1: Summary of regression model outcomes

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.430707	0.142562	10.03565	0.0000
ACI	-0.002693	0.100529	-0.026786	0.9787
BC	0.170812	0.102203	1.671291	0.0959*
BZ	0.212840	0.068582	3.103452	0.0021***
DUAL	0.087486	0.039392	2.220937	0.0272**
PROF	0.934269	0.272145	3.432982	0.0013***
R-squared	0.291633	Mean dependent var	2.014091	
Adjusted R-squared	0.257504	S.D. dependent var	0.627717	
S.E. of regression	0.219897			
Sum squared resid	12.57217			
F-statistic	5.777813			
Prob(F-statistic)	0.000181			

Note:\*, \*\*, \*\*\* significance at 10, 5 and 1 percent

financial distress which implies that lower value of Z-Score means there is more likelihood of bankruptcy. Altman (1968) modified the model and replaced the Market Value of Equity (in  $X_4$ ) by the Book Value of Equity. The modified model is defined as:

$$Z - Score = 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.42X_4 + 0.998X_5$$

## 5 Results and Discussion

Regression analysis was used to predict the empirical results of the study. The results of the study are shown in Table 1.

Before interpreting the results it must be kept in mind that dependent variable for the measure of financial distress in Altman Z-score. The higher the Z-score the lower will be the financial distress. Hence, the positive impact of any independent variable on the depen-

dent variable will be interpreted as decrease in financial distress.

The  $R^2$  explains that 29 percent change in the Z-Score of a company is due to variations in the independent variables i.e. CEO duality, board independence, audit committee independence and the board size. The value of  $R^2$  is low but this is majorly due to a fact that corporate governance practices are not optimal in most of the companies. The value of R square is expected to be higher if such study is tested in the countries with optimal corporate governance practices. The value of F-statistics is 5.777813, which is significant, showing that there is combined impact of independent variables on the Z-Score of a company.

Findings of the study suggest that board size, CEO duality and board composition are affecting the Z-score positively, which means higher these variables in a firm lower will be the level of financial distress in the firm. On the other hand, independence of audit committee's impact on Z-Score is insignificant, which implies that there is no impact of audit committee independence on

the financial distress a firm is facing.

## 6 Conclusion

The study concludes that board size will reduce the level of financial distress in a company. The major reason of such phenomena is due to the fact that larger board sizes have higher level of competence in their board and hence such companies are able to make better financial decisions than otherwise.

The CEO and chairman duality also have resulted in decrease in financial distress in companies. It is because when the Chairman and CEO jobs are segregated the decision are made irrespective of biasness and tough decisions like replacing the CEO or directors are taken for the betterment of the company.

Board independence also has resulted in decrease in financial distress of a company as per statistical results. This is arguable because independent boards are more capable of taking best decisions for the companies that are in best interest of the shareholders and not the executives and management only.

On the other hand, audit committee independence does not have any impact on the financial distress of the companies in Pakistan. This is largely because of the fact that audit committees decision is dependent on the employees of the companies like internal audit related issues or the internal control implementation. Such employees are largely influenced by the management decisions and hence even an independent audit committee does not have control on the level of financial distress level in Pakistani listed companies.

## References

- Abor, J. (2007). Corporate governance and financing decisions of Ghanaian listed firms. *Corporate Governance: The International Journal of Business in Society*, 7(1):83–92.
- Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance*, 23(4):589–609.
- Bhagat, S., Carey, D. C., and Elson, C. M. (1999). Director ownership, corporate performance, and management turnover. *The Business Lawyer*, pages 885–919.
- Cadbury Report, A. (1992). *Report of the committee on the financial aspects of corporate governance*, volume 1. Gee.
- Datta, S. and Datta, M. E. (1995). Reorganization and financial distress: An empirical investigation. *Journal of Financial Research*, 18(1):15–32.
- Elloumi, F. and Gueyie, J.-P. (2001). Financial distress and corporate governance: an empirical analysis. *Corporate Governance: The International Journal of Business in Society*, 1(1):15–23.
- Gilson, S. C. (1989). Management turnover and financial distress. *Journal of Financial Economics*, 25(2):241–262.
- Hassan Al-Tamimi, H. A. (2012). The effects of corporate governance on performance and financial distress: The experience of UAE national banks. *Journal of Financial Regulation and Compliance*, 20(2):169–181.
- Hillman, A. J. and Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3):383–396.
- Lee, T.-S. and Yeh, Y.-H. (2004). Corporate governance and financial distress: Evidence from Taiwan. *Corporate Governance: An International Review*, 12(3):378–388.
- Li, H.-x., Wang, Z.-j., and Deng, X.-l. (2008). Ownership, independent directors, agency costs and financial distress: evidence from Chinese listed companies. *Corporate Governance: The International Journal of Business in Society*, 8(5):622–636.
- Mallette, P. and Fowler, K. L. (1992). Effects of board composition and stock ownership on the adoption of “poison pills”. *Academy of Management Journal*, 35(5):1010–1035.
- Muranda, Z. (2006). Financial distress and corporate governance in Zimbabwean banks. *Corporate Governance: The International Journal of Business in Society*, 6(5):643–654.
- Parker, S., Peters, G. F., and Turetsky, H. F. (2002). Corporate governance and corporate failure: a survival analysis. *Corporate Governance: The International Journal of Business in Society*, 2(2):4–12.
- Shivdasani (2004). Best practices in corporate governance: what two decades of research reveals. *Journal of Applied Corporate Finance*, 16(2-3):29–41.
- Simpson, W. G. and Gleason, A. E. (1999). Board structure, ownership, and financial distress in banking firms. *International Review of Economics & Finance*, 8(3):281–292.
- Wajid, H. and Shah, S. A. (2017). The influence of corporate governance and ownership structure on capital structure of Pakistani listed companies. *Journal of Contemporary Management Sciences*, 1(2):31–46.
- Weisbach, M. S. (1988). The determinants of board composition. *The RAND Journal of Economics*, pages 589–606.
- Yi, W. (2012). Z-score model on financial crisis early-warning of listed real estate companies in China: a financial engineering perspective. *Systems Engineering Procedia*, 3:153–157.

# Impact of Procedural Justice on Organizational Commitment with Moderating Effect of Pay Satisfaction

Muhammad Arif Khattak<sup>1\*</sup>, Muzammal Ilyas Sindhu<sup>1</sup>, Aftab Haider<sup>1</sup>, Syeda Faiza Urooj<sup>2</sup>

<sup>1</sup>*Bahria University, Islamabad, Pakistan*

<sup>2</sup>*Federal Urdu University, Islamabad, Pakistan*

---

**Abstract.** The current study explored the relationship between procedural justice and organizational commitment with the moderating role of pay satisfaction. Furthermore, it also aimed to identify the impact of pay satisfaction on organizational commitment. The study was conducted based on the data collected from 400 employees from the telecom sector. The results of study revealed positive and significant impact of procedural justice and pay satisfaction on organizational commitment. It was also found that procedural justice plays a positive and significant role in enhancing organizational commitment behavior. Finally, the findings further suggested that pay satisfaction positively moderates the relationship between procedural justice and organizational commitment. Implications and suggestions are discussed for future research.

---

## 1 Introduction

Becker (1960) focused on organizational commitment and calculative commitment as forms of commitment. Later on several other researchers focused their attention towards this topic. During the late 1970s, Mowday et al. (1979) introduced another form of commitment and named that as attitudinal commitment. During 1990s, researchers focused heavily on organizational commitment. Meyer and Allen (1991) introduced three components model using three scales named as affective commitment scale (ACS), continuance commitment scale (CCS) and normative commitment scale (NCS).

Concept of procedural justice is derived from agency theory (Berle and Means, 1932; Simon, 1951); equity model (Adam, 1965) in which employee's perception about rewards and actual rewards they receive was explained. Leventhal et al. (1980) proposed six rules to determine procedural justice of the organization, which are, use of accurate data, input from employees, consistently apply decisions to all employees, no biased decision making, review questionable decisions and follow ethical standards. Agency theory also supported this concept, much like Property rights theorists (Voeller, 1987) claimed that when a transaction is conducted, a transaction cost occurs.

It was early 1960s when for the first time, researchers studied the relationship of Employee satisfaction with compensation by including the dimen-

sion of pay in job descriptive index and Minnesota satisfaction questionnaire. Followed by focusing towards this dimension, but they used it as a generic term. In mid of 1970s, researchers used it specifically to include the dimension of satisfaction with pay, satisfaction with administration of compensation. Heneman III and Schwab (1985) defined four dimensions, which were satisfaction with pay level, benefits level, pay raises and structure/administration of compensation.

The aim of this study is twofold; one is to examine the impact of procedural justice and pay satisfaction on organizational commitment and second is to check the moderating effect of pay satisfaction in the relationship between procedural justice and organization commitment. The past researches studying the relationship between procedural justice and organization commitment haven't studied the relation with pay satisfaction. Organizational commitment has grabbed much attention in today's rapid changing and Global environment (Michaels, 1988).

Organizations want to attract and retain employees so that their effectiveness could be increased. Procedural Justice is very helpful for retaining employees in the organizations, such as when they perceive that different means used for making decisions are fair so they accept those decisions and stay loyal with the organization (Lind and Tyler, 1988). Pay Satisfaction has especially grabbed attention of many scholars, as literature supports the fact that pay satisfaction can stimulate trust and organizational commitment (Heneman

---

\*Corresponding author.

Email: arifkhattak78@gmail.com

and L, 1992). Besides the presence of these kinds of theoretical arguments, there has been little empirical evidence present on the above-mentioned twofold study purpose, so it stimulated for further investigation on this relationship (Griffin et al., 2007).

A lot of researchers have found a direct relationship between pay satisfaction and several organizational outcomes like turnover intention, productivity, motivation and organizational commitment; and in congruence to meta-analytical review conducted by Judge and Colquitt (2004), this study is aimed to empirically test this theoretical relationship. between procedural justice and organization commitment by using pay satisfaction as a moderator.

Besides that, the current study endeavors to provide guidance to public sector for pay satisfaction and commitment. Native researchers will get support from these results and they can enhance this relation by including other variables like turnover intention. This research has the aim of providing non-discriminatory results regarding the moderating effect of pay satisfaction variable between other two variables procedural justice and organizational commitment.

## 2 Literature Review

### 2.1 Procedural Justice and Organizational Commitment

Cohen (1991) proposed that the relationship between organizational commitment and turnover varies across different stages of life and stated that procedural justice and communication of information is a very important predictor of turnover.

According to Cummings and Bromiley (1996) there are three dimensions of trust; honesty, avoiding excessive advantages relative to others and agreeing to depend on others. Scarpello and Vandenberg (1987) stated that satisfaction with supervisor means satisfaction with one's immediate boss, not with other conditions of the workplace or any kind of other agents. They further argued whether the employee who is satisfied with supervisor is also committed to the organization. It had been substantiated that moral and alienate commitment is related to supervisor satisfaction while calculative commitment is not.

A study by Pfeffer (1994) investigated the relation of satisfaction with HR practices and the organization's commitment between three groups of employees; professional, line managers and workers. The results showed a significant relation between these variables. Pfeffer (1994) stated that best practices are HR practices, which can be implemented within any kind of organization, for any kind of employees and result in increased performance.

Hall and Schneider (1972) defined organizational

commitment as employee's identification and attachment with organizational goals and values. Several researchers have attributed different concepts and explained the organizational commitment variable like loyalty, job involvement, job attachment, job commitment and moral commitment. Their results showed a positive effect of Organizational commitment towards desire to be part of organization and negatively related with turnover intention.

Smith and Peterson (1988) explained the three types of commitment as affective, continuance and normative. Gerhart and Rynes (2003) argued that different organizations are paying differently to its employees. Some are using individual performance criteria and some are focused on collective performance, i.e. team based; whereas some are using a hybrid approach. Several researchers have found a positive relation between incentives and performance and argued that when their performance increases, they are motivated and committed with organization, which ultimately reduces turnover rate.

Meyer and Allen (1991) claimed that due to socio-economic changes and Globalization, importance of employee's attachment with organizations has increased and further argued that organizational commitment and organization support are two main dimensions, which form a bonding relationship between organization and employees.

Mowday et al. (2013) have discussed the attachment of employees with the organization and in explaining commitment, they said it is about employee's acceptance of values and goals, making efforts to achieve them and to remain part of the organization. Their findings showed the positive impact of affective commitment and perceived organizational support, whereas a negative relation between negative mood and perceived organizational support.

Chonko (1986) proposed that Organizational Commitment is independent and free from any kind of personal interests and temporary concerns. Mowday et al. (2013) defined it as a person's identification and desire to stay loyal and part of the organization. Their study investigated different aspects of organizational commitment and found that if employees are committed to their targets and goals of organizations, then it will lead to the organization's effectiveness. Age and income were un-correlated while anticipatory socialization, manager satisfaction and work satisfaction had positive relation with commitment; whereas job search behavior and perceived job alternatives were negatively related with organizational commitment.

Masterson et al. (2000) argued that organizational commitment is being predicted by procedural justice than Interactional justice as it is considered more accurate among these three types of organizational justice. Guth and MacMillan (1986) claimed that commitment with the organization is positively related to achieve-

ment of organizational strategic goals. Mathieu and Zajac (1990) proposed that if management wants to increase satisfaction of its employees and reduce the absenteeism level, then it has to increase the commitment level of employees. Randall (1990) proposed that Organizational Commitment is a very important factor because it brings positive changes in employees and they exert more effort towards the achievement of organizational goals.

Citera and Rentsch (1993) proposed that organizational commitment to the managerial staff is dependent on three main factors: fairness of outcomes, fairness of the procedures and how their leaders treat them. Their study investigated the relation between organizational justice and managerial commitment. The findings suggested that procedural justice is positively related to affective commitment. Kramer and L (1996) also claimed that trust is an important variable and it plays a crucial role in Organizational Effectiveness, Efficiency and goal achievement.

Mitra et al. (1992) stated that turnover is studied with many variables because of its importance, as organizations wish to retain their employees, due to the high cost associated with the high turnover (advertisement, recruitment selection and training costs). Adams (1965) stated that fairness perception is very important for the employees because they not only compare benefits against their efforts as well as with their colleague's benefits and efforts level. Folger and Konovsky (1989) claimed that Procedural Fairness brings a lot of benefits for the organization and most importantly results in job satisfaction, which ultimately leads to organizational commitment. Begley et al. (2006) proposed that a lot of attention is being given to organizational justice and argued about fair procedures by stating that if they are being used in the organization then employees accept the decisions.

Colquitt (2001) stated that this focus is due to one reason, which is the relationship of Procedural Justice with several organizational outcomes like Organizational Commitment, Job and Pay satisfaction, Absenteeism, etc. They investigated different factors of Procedural Justice. The findings showed a significant relation of Procedural Justice with effective performance of teams.

## 2.2 Pay Satisfaction as a moderator

Williams et al. (2006) proposed that employee's level of pay satisfaction is not only determined by absolute pay level, but it also depends on the relative comparisons and pay satisfaction is necessary for the organizations in order to make their compensation system successful. Cropanzano et al. (2002) investigated the relationship between contextual factors and Procedural Justice in promotion decisions for female employees. Their study results showed that individual cognitive

processes develop a perception of Procedural Justice and also showed that Gender schema has significant contribution as a moderator between procedural justice and formal career path, as well as between procedural justice and perceived number of female employees as role models.

Milkovich et al. (2002) proposed that money is the basic incentive, which is used by managers to attract and retain employees. They argued that everyone sees money with a different eye. Cohen (1991) proposed that perception of fairness is necessary for the organizations, because they help to boost up employees and especially they are very much important for compensation related decisions. They claimed in previous research that when an organization is designing a pay system, it must focus on the fairness issue. Their research has been conducted to check the relationship between performance, gender and seniority with pay inequity, while studying how pay communication moderates this relationship. The results indicated that seniority and performance are related to perceived pay inequity while gender was not related and when pay system was communicated, employee satisfaction was enhanced.

## 2.3 Hypotheses

*H1. There is a positive relationship between procedural justice and organizational commitment.*

*H2. There is a positive relationship between procedural justice and pay satisfaction.*

*H3. There is a positive relationship between pay satisfaction and organizational commitment.*

*H4. Pay satisfaction positively moderates the relation between procedural justice and organizational commitment.*

## 3 Theoretical Framework

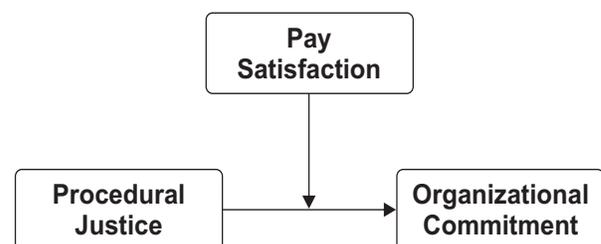


Figure 1: Theoretical framework.

## 4 Methodology

This study is a deductive based approach in which hypothesis testing is elaborated using a sample of 242 respondents from telecom sectors. A purposive sampling technique is used for sample selection and response rate is 61%. SPSS software is used to identify the relation between all three variables and reliability test, descriptive statistics, correlation matrix and regression analysis are considered sources for evaluation. Porter et al. (1974) scale is used for organizational commitment and its reliability value is 0.79. Colquitt (2001) scale is utilized for testing procedural justice and its Cronbach’s Alpha score is 0.71 which is satisfactory. Heneman III and Schwab (1985) scale is utilized for estimation of pay satisfaction with eighteen items and its reliability value is 0.88.

## 5 Results and Discussion

The current study explored the influence of procedural justice on organizational commitment with the moderating impact of pay satisfaction. It is mandatory to confirm that data used in the study are normal before the start of correlation and regression analysis. Descriptive statistics are used for identification of mean, standard deviation, minimum and maximum of values and total number of items to scale considered for analysis. The results in descriptive statistics are showing that all the values are normally distributed and closure to neutral responses. Furthermore, standard deviation is showing the risk of each factor considered and Cronbach alpha is also mentioned here.

Table 1: Descriptive Statistics and Correlation Analysis

Variable	Mean	1	2	3	Alpha
OC	3.8	1			0.79
PJ	3.9	0.38**	1		0.71
PS	3.87	0.41**	0.43**	1	0.88

\*\*p<0.01 level of significance

Table (1) shows reliability, descriptive statistics and correlation analysis of all three variables. The correlation between organizational commitment to procedural justice is positive and significant at 0.38. The correlation between organizational commitment and pay satisfaction is significant at 0.41, showing a direct positive significant relationship. Similarly, the correlation between procedural justice and pay satisfaction is significant at 0.43, showing a direct positive significant relationship.

## 5.1 Regression Analysis

Regression analysis indicates the dependence of dependent variable upon independent variables. Organizational commitment was regressed on procedural justice to test the hypothesis. R-square indicates that how much variation in dependent variable comes from independent variable procedural justice.

Table (2) shows the results of regression analysis to find the effect of procedural justice on organizational commitment. The value of R<sup>2</sup> is 0.13, which shows that procedural justice brings 13% change in organizational commitment. value of 0.379 shows that a significant change in organizational commitment is brought by procedural justice, which leads to the acceptance of hypothesis one.

Table 2: Regression analysis for Impact of Procedural Justice on Organizational Commitment

Predictors	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control Variables		0.13	
Step 2			
PJ	0.379**	0.13	0.14

\*\*p<0.01

Table (3) shows the results of regression analysis to find the effect of procedural justice on pay satisfaction. The value of R<sup>2</sup> is 0.18, which shows that procedural justice brings 18% change in pay satisfaction.  $\beta$  value of 0.426 shows that a significant change in pay satisfaction is brought by procedural justice; henceforth, substantiating the acceptance of hypothesis two.

Table 3: Regression analysis for Impact of Procedural Justice on Pay Satisfaction

Predictors	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control Variables		0.18	
Step 2			
PJ	0.426**	0.18	0.17

\*\*p<0.01

Table (4) shows regression analysis of 3 variables. The value of R<sup>2</sup> is 0.21 shows that 21% change was brought by adding pay satisfaction in the relationship, whereas, Beta weights are reduced from 0.36

to 0.24 and it showed statistical significant results indicating moderation. The value of  $\beta$  is 0.24 shows significant and positive impact of procedural justice on organizational commitment, while value  $\beta$  is 0.29 shows significant and positive impact of pay satisfaction on organizational commitment; therefore, leading to the acceptance of hypothesis three. Moderation impact also showing significant and positive relationship, which means pay satisfaction significantly and positively moderates the relationship between procedural justice and organizational commitment. Thus, based on these results, hypothesis four has been accepted as well, i.e. pay satisfaction positively moderates the relationship between procedural justice and organizational commitment.

Table 4: Moderation Analysis

Organizational Commitment			
Predictors	$\beta$	$R^2$	$\Delta R^2$
Step 1			
Control Variables		0.21	
Step 2			
PJ	0.240*	0.21	0.24
PS	0.290*		
Step 3			
PJ x PS	0.360*	0.18	0.19

\*\* $p < 0.01$

## 6 Discussion

This current study investigated the impact of procedural justice and pay satisfaction on organizational commitment and to investigate the moderating effect of pay satisfaction in fostering relation of procedural justice with organizational commitment. The first hypothesis anticipated a positive effect of procedural justice on organizational commitment and the proposition has been demonstrated valid as it is having a huge positive effect on organization commitment. Past inquires have displayed this effect as positive and this study is in accordance with them.

Second hypothesis anticipated positive impact of pay satisfaction on organizational commitment and results have substantiated this speculation by giving positive and critical qualities. Salaries are continually engaging element for workers as it is utilized to satisfy needs. Fulfillment with pay is the predecessor of hierarchical duty. The consequences of this study were

again in accordance with past studies as [Currall et al. \(2005\)](#) led an exploration to discover the connection of pay satisfaction with organizational outcomes, where outcomes have demonstrated positive relationship between pay satisfaction measurements and unwavering quality estimation of 84%. The third hypothesis anticipated impact of procedural justice and pay satisfaction and results have substantiated the hypothesis. [Till and Karren \(2011\)](#) directed study to check the effect of association equity on pay level satisfaction. Outcomes have demonstrated noteworthy and positive effect. [Stone et al. \(2010\)](#) directed study to check fairness perception and satisfaction with segments of pay satisfaction, where outcomes demonstrated positive effect.

Fourth hypothesis anticipated pay satisfaction as moderator with procedural justice and organization commitment. Results indicated that pay satisfaction positively moderates the relationship between procedural justice and organizational commitment. Couple of past studies have taken pay satisfaction as a go between organization effectiveness and job satisfaction.

## 7 Conclusion

The finishing up comments after the whole examination and talk, we have thought of descriptive statistics, correlation, regression, analysis of procedural justice, pay satisfaction and the organization's commitment. It demonstrates the positive effect of procedural justice and pay satisfaction on organizational commitment and positive moderation by including pay satisfaction between procedural justice and organizational commitment. These factors are noteworthy and decisions related with each other. Regression analysis is quite significant, and reliability values of organizational commitment, procedural justice and pay satisfaction are also above benchmark respectively, consequently leading to the acceptance of all four hypotheses.

Existence of procedural justice in any organization indicates that workers are happy with their compensation, then their dedication level with the organization builds which is a decent sign for general organizational performance. This research could be replicated in other economies with the addition of other variables and increasing number of samples. Furthermore, pay structure must be designed on fairness parameters so that each employee should have the perception of fairness and equity in mind and show more efforts towards achievement in financial and non-financial objectives of the organization.

Managers and supervisors should develop a conducive organizational internal environment in acquiring reasonableness all strategies utilized for making decisions. The organization should design remuneration structure in such a way where employees are mo-

tivated to put effort in return of rewards. Managers should provide training opportunities regarding fairness issues so that all employees follow ethical guidelines and overtake organizational goals, so that they become loyal with organization and remove conflicts.

## References

- Adam, H. (1965). Adenosine-5'-diphosphate and adenosine-5'-monophosphate. In *Methods of enzymatic analysis*, pages 573–577. Academic Press New York.
- Becker, H. S. (1960). Notes on the concept of commitment. *American Journal of Sociology*, 66(1):32–40.
- Begley, T. M., Lee, C., and Hui, C. (2006). Organizational level as a moderator of the relationship between justice perceptions and work-related reactions. *Journal of Organizational Behavior*, 27(6):705–721.
- Berle, A. and Means, G. (1932). The modern corporate and private property. *McMillan, New York, NY*.
- Chonko, L. B. (1986). Organizational commitment in the sales force. *Journal of Personal Selling & Sales Management*, 6(3):19–28.
- Citera, M. and Rentsch, J. R. (1993). Is there justice in organizational acquisitions? the role of distributive and procedural fairness in corporate acquisitions.
- Cohen, A. (1991). Career stage as a moderator of the relationships between organizational commitment and its outcomes: A meta-analysis. *Journal of Occupational Psychology*, 64(3):253–268.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: a construct validation of a measure. *Journal of applied psychology*, 86(3):386.
- Cropanzano, R., Prehar, C. A., and Chen, P. Y. (2002). Using social exchange theory to distinguish procedural from interactional justice. *Group & Organization Management*, 27(3):324–351.
- Cummings, L. L. and Bromiley, P. (1996). The organizational trust inventory (oti). *Trust in organizations: Frontiers of theory and research*, 302(330):39–52.
- Currall, S. C., Towler, A. J., Judge, T. A., and Kohn, L. (2005). Pay satisfaction and organizational outcomes. *Personnel psychology*, 58(3):613–640.
- Folger, R. and Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management journal*, 32(1):115–130.
- Gerhart, B. and Rynes, S. (2003). *Compensation: Theory, evidence, and strategic implications*. SAGE publications.
- Griffin, M. A., Neal, A., and Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of management journal*, 50(2):327–347.
- Guth, W. D. and MacMillan, I. C. (1986). Strategy implementation versus middle management self-interest. *Strategic Management Journal*, 7(4):313–327.
- Hall, D. T. and Schneider, B. (1972). Correlates of organizational identification as a function of career pattern and organizational type. In *Academy of Management Proceedings*, volume 1972, pages 159–161. Academy of Management.
- Heneman and L, R. (1992). *Merit pay: Linking pay increases to performance ratings*. Addison-Wesley/Addison Wesley Longman.
- Heneman III, H. G. and Schwab, D. P. (1985). Pay satisfaction: Its multidimensional nature and measurement. *International journal of Psychology*, 20(2):129–141.
- Judge, T. A. and Colquitt, J. A. (2004). Organizational justice and stress: the mediating role of work-family conflict. *Journal of Applied Psychology*, 89(3):395.
- Kramer and L, S. (1996). *Geotechnical earthquake engineering*. Pearson Education India.
- Leventhal, G. S., Karuza, J., and Fry, W. R. (1980). Beyond fairness: A theory of allocation preferences. *Justice and social interaction*, 3(1):167–218.
- Lind, E. A. and Tyler, T. R. (1988). *The social psychology of procedural justice*. Springer Science & Business Media.
- Masterson, S. S., Lewis, K., Goldman, B. M., and Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management journal*, 43(4):738–748.
- Mathieu, J. E. and Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological bulletin*, 108(2):171.
- Meyer, J. P. and Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, 1(1):61–89.
- Michaels, C. F. (1988). Sr compatibility between response position and destination of apparent motion: evidence of the detection of affordances. *Journal of Experimental Psychology: Human Perception and Performance*, 14(2):231.
- Milkovich, G. T., Newman, J. M., Milkovich, C., and Mirror, T. (2002). *Compensation*, volume 8. McGraw-Hill New York.
- Mitra, A., Jenkins, G. D., and Gupta, N. (1992). A meta-analytic review of the relationship between absence and turnover.
- Mowday, R. T., Porter, L. W., and Steers, R. M. (2013). *Employee' organization linkages: The psychology of commitment, absenteeism, and turnover*. Academic press.
- Mowday, R. T., Steers, R. M., and Porter, L. W. (1979). The measurement of organizational commitment. *Journal of vocational behavior*, 14(2):224–247.

- Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the work force*. Harvard Business Press.
- Porter, L. W., Steers, R. M., Mowday, R. T., and Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of applied psychology*, 59(5):603.
- Randall, D. M. (1990). The consequences of organizational commitment: Methodological investigation. *Journal of organizational Behavior*, 11(5):361–378.
- Scarpello, V. and Vandenberg, R. J. (1987). The satisfaction with my supervisor scale: Its utility for research and practical applications. *Journal of Management*, 13(3):447–466.
- Simon, H. A. (1951). A formal theory of the employment relationship. *Econometrica: Journal of the Econometric Society*, pages 293–305.
- Smith, P. B. and Peterson, M. F. (1988). *Leadership, organizations and culture: An event management model*. Sage Publications, Inc.
- Stone, T. H., Jawahar, I., and Kisamore, J. L. (2010). Predicting academic misconduct intentions and behavior using the theory of planned behavior and personality. *Basic and Applied Social Psychology*, 32(1):35–45.
- Till, R. E. and Karren, R. (2011). Organizational justice perceptions and pay level satisfaction. *Journal of Managerial Psychology*, 26(1):42–57.
- Voeller, J. (1987). A note on fair equality of rules. In *Agency Theory, Information, and Incentives*, pages 473–480. Springer.
- Williams, M. L., McDaniel, M. A., and Nguyen, N. T. (2006). A meta-analysis of the antecedents and consequences of pay level satisfaction.

## Determinants of Trading Volume in Karachi Stock Market

Musawwar Zahoor<sup>1</sup>, Muhammad Bilal Saeed<sup>2</sup>, Shujahat Haider Hashmi<sup>1\*</sup>

<sup>1</sup>Capital University of Science and Technology, Islamabad

<sup>2</sup>FAST University Islamabad

---

**Abstract.** This study aimed to investigate the determinants of trading volume. For this purpose a sample of fifty firms listed at KSE had been considered. 50 firms based on capitalization were selected from non-financial sector covering a time period from 2005 to 2014. Descriptive statistics, Variance inflation factor, and panel data estimation model have been employed for the purpose of analysis. The findings revealed that determinants have significant effect on trading volume. It has been observed that abnormal return, volatility (systematic & residual risk), size, institutional holding, dividend yield, positive returns, and negative returns have positive effect on trading volume, while institutional holding has no effect on trading volume.

---

### 1 Introduction

Trading volume is known to be an important factor in stock market because it activates or deactivates the movement of stock price. Stock market fluctuation and trading volume are influenced by the flow of information; the more accurate and timely information available to investors, more accurately they can make decision about particular stock/security trading in market. Investor's reaction to news can lead to increase in trading volume (Mubarik and Javid, 2009). Technical analysts make their trading decision by examining prior year volume and price data, to determine trends and predict future behavior of stock market. They state that volume should move with trends, such that if price is increasing, volume should move in upward trend and vice-versa. Analysts use various tools and techniques to identify trends and patterns which can aid in predictions of future market movements (Reilly and Brown, 2002).

There are four reasons to study price-volume relationship; firstly it tells us about the structure of financial market, secondly it is important for event studies, thirdly it is an essential part of speculation and last but not the least, it also provides insight into future markets (Karpoff, 1987). Volatility can be systematic or unsystematic. Systematic risk is also known as market risk and it is affected by factors like fiscal budget, market sentiments, etc., through which prices of stock are pushed up or down in different times, whereas, the other type of risk is unsystematic or company-related factors, such as competition from inside and outside of the country, financing pattern change, man-

agement change, etc. This type of risk can be eliminated, whereas, former type of risk cannot be eliminated through diversification. Fluctuation rate depends upon the relationship of stock with the entire market. By use of this information investors assess the management efficiency and set strategies, such as either buy/sell or hold stock and readjust their portfolios (Bundoo, 2000).

Earlier studies demonstrated that the Institutional ownership is also a measure of heterogeneity and that individual investor engage in trading practices different from institutional investors (Chan and Lakonishok, 1995; Tripathy, 2011). There are some reasons that individual investors engage in trading practices different from institutional investors. First one is that Institutional investors, as compared to individuals generally hold larger shares and the other one is, that in a stock Institutional investors when initiate a new position they act as momentum traders, but when they terminate or re-balance their portfolio, they follow contrarian approach. Nofsinger and Sias (1999) also documented that the trading behavior of institutional and individual investors respond differently to the release of macro-economic and specific news.

According to the study of Lo and Wang (2000), with the growth of mutual fund industry and large institutional investors, it is difficult to invest in smaller cap stocks because they have corporate control and liquidity issues. Large cap stocks have more active trading as compared to small cap stocks, because large cap firms have diverse ownership and great information asymmetry, which can lead to more active trading. Capital gains and dividends are taxed differently, traders buy stock before its ex dividend date and sell it into market shortly

---

\*Corresponding author.

Email: shujahat@cust.edu.pk

after, thereby resulting in an increase in trading activity in market. Green (1980) and Koski and Scruggs (1998) observed trading volume during ex-dividend days and found that there is an evidence of tax-induced clientele effect.

Theory of market microstructure states that how specific trading mechanism affects the price formation process. It applies to the exchange of real or financial assets. Market microstructure relates the behavior of market participants, investors, dealers, etc. Thus microstructure is a critical factor that affects the investment decision as well as investment exit. According to Shefrin and Statman (1985) the disposition effect is an important determinant, which describes about the investors' desires to hold loser stocks and sell stocks that have appreciated and realized gains. The term overconfidence relates to investor's behavior of trading in market, it makes an investor to trade more, less risk averse and generate more trading volume (Gervais and Odean, 2001).

This study is going to contribute towards the prediction of trading behavior/ practices of investors in stock market. This study provides benefit to the shareholders, investors; they can attain benefit in adjusting their portfolio or set investment strategies about particular stock, which are trading in market. It helps manager to actively manage their portfolio of stocks. The focus of our study is to inspect the implication of different characteristics associated with individual level as well as market level. This study is helpful for the Government and regulatory bodies to make such policies to maintain and enhance trading volume by attracting foreign investors to invest in Pakistani market.

In developing countries like Pakistan, where the environment is highly volatile and politically instable, this could have an impact on whole system of country. Usually, Investors are looking for higher return and lower risk on an investment. Higher returns & lower risk encourage investors to make trading decisions, lead to increase in inflow of capital. But in a volatile environment investors are less interested in making investment decision about particular stock or security trading in market. Trading volume and its determinants are well researched areas in developed countries, but the problem is that very little literature is available regarding Pakistan market to explore this relationship. So this study aims to focus on examining the determinants of trading volume and tries to fill this gap.

## 2 Literature Review

Many researchers have conducted researches on the relationship between trading volume and its determinants from different view point in different cultures, some of which have findings that are valuable for this present study. A limited review of the different efforts

of research regarding relationship between trading volume and its determinants are cited here-in-after;

### 2.1 Abnormal Return and Trading Volume

Wang (1993, 1994) stated that turnover should be negatively related to the liquidity premium. He developed a model in which he examined the nature of investor's heterogeneity and behavior of volume in relation to changes in price. It was observed that the information heterogeneity may lead to either high trading or low trading volume. Another study which was examined by, Lo and Wang (2000) found different results in relation to abnormal return and volume; they stated that during some period there exists positive relationship between volume and returns; whereas, during some other period, a negative relationship between volume and returns exists. Furthermore, Hartian and Sitorus (2015) examined the relationship between liquidity and stock return, by using the data of 10 developed and 16 developing countries. Findings of the study stated that a significant positive relationship between liquidity and stock returns exists in developing countries; whereas, in case of developed countries there exists a significant negative relationship between liquidity and stock return. So the relationship between volume and return may either be positive or negative. On the basis of above mentioned studies we have developed the following hypothesis:

*H1. There is a significant relationship between abnormal return and trading volume.*

### 2.2 Risk (Systematic and Residual Risk) and Trading Volume

Lo and Wang (2000) examined the association between trading volume and risk, which was proxied by beta. They found that the impact of beta on measure of trading activity is explained by the differences of opinions among investors. Chen et al. (2001) in their study examined the affiliation between trading volume, stock returns, and volatility. It was observed that there exists a positive relationship between trading volume and volatility of returns. Wang et al. (2005) investigated the affiliation between volume and stock return volatility; postulating that a significant relationship between volume and volatility of returns exists. Mala and Reddy (2007) examined the volatility of stock market in Fiji. It was observed that 7 out of 16 listed firms show volatile traits. Findings of their study suggested that rate of interest has a major impact on volatility of stocks in market. Rehman et al. (2012) investigated the connection between risk-return and trading volume at KSE-100. Their findings indicated that the presence of a significant relationship between risk- return and trading volume. Furthermore, Al Samman and Al-Jafari

(2015) also examined the relationship trading volume and volatility; reporting a significant relationship between the two. Therefore, the following hypothesis was developed:

*H2. There is a significant positive relationship between risk and trading volume.*

### 2.3 Size and Trading Volume

Earlier studies demonstrated that the relationship between firm size and turnover can be either positive or negative. [Lo and Wang \(2000\)](#) investigated the affiliation between firm size and turnover. It was found that firm size has negative relationship with turnover during the period of 1962-1971 and a positive relationship after that. ([Tripathy, 2011](#)) investigated the association between size and trading volume; and found that there is a negative relationship between firm size and trading volume. Furthermore, [Moradi \(2015\)](#) postulated that there is an insignificant relationship between firm size and stock return, suggesting that from investor point of view, small and big companies are equally trustworthy. As per the aforementioned literature, we have developed the following hypothesis.

*H3. There is significant relationship between size and trading volume.*

### 2.4 Institutional Holding and Trading Volume

Earlier studies documented that Institutional ownership is a measure of heterogeneity and further suggested that trading practices of institutional investor is different from individual investors. [Chan and Lakonishok \(1995\)](#) explored the behavior of stock prices and institutional trading; their results indicated that there is a strong relationship between institutional trading and stock returns. The findings suggested that there are some reasons of high trading of institutional investors. Generally, institutional investors hold larger proportion of shares as compared to individual and keep observing firm's activities in market. Second, institutional investors in a stock when they initiate a new position, act as momentum trader in market, and when terminate their position or re-balance their portfolio they follow contrarian approach in stock market. [Nofsinger and Sias \(1999\)](#) examined the trading behavior of investors and found that there is a positive relationship between institutional investors and turnover. Investors (institutional as well as individual) behave differently in response to release of macro-economic or specific news. Institutional investors can manage their portfolio better than individual investors. [Tkac \(1999\)](#) explored the trading volume with respect to individual trading activity as well as market wide trading. His study findings

suggested that there is a positive relationship between institutional ownership and turnover. The study findings further indicated that institutional investors have more active strategies than an individual investor in market. As per above mentioned studies we have developed the following hypothesis.

*H4. There is a significant positive relationship between institutional holding and trading volume.*

### 2.5 Dividend Yield and Trading Volume

[Green \(1980\)](#) investigated the stock price behavior around ex-dividend days; postulating that there is a significant positive relationship between trading volume and dividend yield. Findings of his study suggested that there exists tax-induced clientele effect. [Koski and Scruggs \(1998\)](#) also examined the affiliation between trading volume and dividend yield at New York Stock Exchange. Evidence of significant abnormal trading volume by securities dealers exist around ex-dividend days which is positively related to dividend yield. [Graham and Kumar \(2006\)](#) examined the trading activity of households and individuals; they found that there is a significant positive relationship between trading volume and dividend yield. Furthermore, the traders buy shares before ex-dividend day and sell it shortly after, thereby increasing the trading activity in market. [Felixson and Liljebloom \(2008\)](#) examined the trading activity of investors around ex-dividend day; it was observed that there exists a tax induced clientele effect. [Chen et al. \(2013\)](#) investigated ex-dividend price behavior and investors trading. Result of the study showed that a significant positive relationship between ex-dividend day and trading volume exists. The results further suggested that different tax rate is an important factor, which affects share price and investor behavior in market. Furthermore, [Majanga \(2015\)](#) also found significant positive association between dividend and stock price. On the basis of above mentioned studies we have developed the following hypothesis.

*H5. There is a significant positive relationship between dividend yield and trading volume.*

### 2.6 Positive/Negative returns and Trading Volume

In literature it is widely documented that the relationship between trading volume and stock returns might be asymmetric, which could arise due to disposition effect and investor overconfidence. [Statman et al. \(1999\)](#) examined the investor overconfidence, disposition effect and trading volume, and found that individual stock turnover is positively related to lagged security returns (disposition effect) and lagged market returns (overconfidence hypothesis). [Statman et al.](#)

(2006) investigated the turnover of individual security and lagged market returns. It was found that there exist a significant positive relationship between turnover of individual security or stock returns (disposition effect) and lagged market returns (overconfidence hypothesis). [Prosad et al. \(2013\)](#) investigated the two behavioral models overconfidence and disposition effect, in Indian market. The results of their study suggested that the biases, overconfidence and disposition effect prevail in market. [Tariq and Ullah \(2013\)](#) investigated the investor overconfidence of stock market in Pakistan. They found that a significant relationship between return and volume of trading securities. Overall, above-mention studies validate the existence of significant relationship between returns and trading volume, so based on earlier literature we have developed the following hypothesis:

*H6. There is a significant relationship between asymmetric effect and trading volume.*

### 3 Research Methodology

The sample size in this study consists of 50-High Capitalized Non-Financial firms, selected from 10 different Sectors for the period of 10 years, i.e. 2005 to 2014. The data were obtained from the various sources such as Business Recorder and companies Annual reports. The sample includes only non-financial firms functioning in Pakistan from different industries such as, Automobile Assembler, Automobile Parts, Cement, Fertilizer, Food & Personal Care Products, Glass & Ceramics, Oil and Gas, Pharmaceutical, Sugar, and Textile. In this research the variable decomposition has been followed by study of [Kumar et al. \(2009\)](#) for the prediction of Determinants of Trading Volume. Trading volume is used as dependent variable. For the purpose of measurement, we take average of natural log of turnover each day.

The specific form of the econometric model that is as follows:

$$TV_{it} = \alpha + \beta_1 AR_{it} + \beta_2 SR_{it} + \beta_3 RR_{it} + \beta_4 SZ_{it} + \beta_5 DY_{it} + \beta_6 INST_{it} + \beta_7 PRET_{it} + \beta_8 NRET_{it} + \epsilon_{it}$$

where,

AR = Abnormal return is used as independent variable. For measurement purpose alpha is used as proxy of this variable.

$$Abnormal\ Return = R_i - R_f = \alpha + \beta [R_m - R_f]$$

SR = Systematic risk beta ( $\beta$ ) is used as proxy of variable and RR: Residual risk ( $6e^2$ ) is used as proxy of variable. SZ: Size is used as independent variable. For measurement of size, we take average of natural log of market capitalization each day.

DY: Dividend Yield is used as independent variable. For measurement of dividend yield we use following

formula which is given below;

Dividend Yield = Cash dividend per share / Market price of share

INST: Institutional Holding, is used as independent variable. Institutional Holding refers to the sum of percentage of common shares held by institutional investors, including insurance companies, mutual funds, banks, investment firms, government firms and other large scale financial institutions out of total capital share of the firm

PRET/ NRET: Positive Return, Negative Return

In literature it is widely documented that the relationship between trading volume and stock returns might be asymmetric. In order to check asymmetric effect that could rise due to disposition effect and investor overconfidence, we used positive returns and negative returns by following the study of [Kumar et al. \(2009\)](#); [Statman et al. \(1999\)](#). The current study used OLS, Panel data technique for the analysis of the results.

### 4 Results and Discussion

This section includes Descriptive statistics, Variance inflation factor, and Regression Analysis. Descriptive statistics shows (mean value, minimum value, maximum value and std. deviation), Variance inflation factor is used to test the problem of multicollinearity and Regression analysis using panel data analysis. Results of the following given below;

As per Table (1), the results show that the average trading volume of high capitalized firm listed in Pakistan is 10.47 thousands (converted to log) and average volatility in trading volume is 3.63. The mean value of firm size is higher 22.3020 and lower value in case of negative returns -0.10463. While, in case of std. deviation institutional ownership shows higher value 3.836345 and lower value of residual risk 0.00714.

In order to check the multicollinearity problem in our data we used variance inflation factor. Table (2) indicates that explanatory variables are independent in nature. The value of VIF test ranging from 1.039179 to 4.818465, which is tolerable limit. So the problem of multicollinearity does not exist.

#### 4.1 Regression Analyses

Panel data analysis includes common effect model, fixed effect model and random effect model. Likelihood Ratio test is applied to find out which model is appropriate; common or fixed model.

As per results shown in Table (3), the probability of cross section is significant, which means that the appropriate model is fixed effect model, as the probability

Table 1: Descriptive Statistics

Variables	Mean	Maximum	Minimum	Std. Deviation
TV	10.47285	17.71267	2.922265	3.638996
DY	0.041015	0.1123	0.0084	0.018316
AR	-0.04697	0.091912	-0.09911	0.03834
INST	15.50307	23.5	8.22	3.836345
SR	0.378911	2.12	-1.15	0.431176
RR	0.024436	0.049991	0.01099	0.00714
PRET	0.049776	0.099234	0.010187	0.01997
NRET	-0.10463	-0.025554	-0.27447	0.071992
SZ	22.30203	28	17.4507	1.918706
Observations	500	500	500	500
Cross sections	50	50	50	50

value is less than 5% significant level. Now to choose the appropriate model between fixed and random effect model, the study perform the Hausman test as given below.

Similarly, it is clear that the value of the probability is significant and less than the 5% significant level, indicating that the best appropriate model is fixed effect model. Hence, this study is considering fixed effect model as their final model to be analyzed, which can be discussed below.

Table (5) shows that the adjusted R-square of fixed effect model is 0.73, which means that 73% variation in dependent variable is explained by independent variables. The coefficient of constant is 0.16, which means that the average trading volume of high capitalized listed companies is 16%. The variable abnormal return has negative and significant relationship with trading volume, indicating that one unit change in abnormal return result in 10.18 unit change in trading volume of the companies.

## 5 Discussion

The results of the study are consistent with Wang (1993), who stated that turnover should be negatively related to liquidity premium. Further, as per Lo and Wang (2000); Wang (1994), the information heterogeneity may lead to either high trading or low trading volume. In literature, it is widely discussed that volatility has two types, i.e., systematic and unsystematic risk. The variable of systematic risk has positive and significant relationship with trading volume, indicating that

one unit change in systematic risk result in 1.07 unit change in trading volume of the companies. The variable of un-systematic risk has positive and significant relationship with trading volume, indicating that one unit change in residual risk result in 36 unit change in trading volume of the companies. Results of the current study are consistent with the findings of Al Samman and Al-Jafari (2015); Chen et al. (2001); Lo and Wang (2000); Mala and Reddy (2007); Rehman et al. (2012); Wang et al. (2005).

These studies found positive and significant effect on trading volume. The variable size has positive and significant relationship with trading volume, indicating that one unit change in size result in 0.44 unit change in trading volume of the companies. Earlier studies demonstrated that the relationship between firm size and turnover can be either positive or negative. Our results are further consistent with Lo and Wang (2000), i.e. larger firms have more diverse ownership and greater information asymmetry, which will lead to more active trading in market. Whereas, inconsistent with the study of Tripathy (2011), Moradi (2015), which stated that the variable institutional holding has insignificant relationship with trading volume. Furthermore, our findings differ with the results of Chan and Lakonishok (1995); Kumar et al. (2009); Nofsinger and Sias (1999); Tripathy (2011), i.e. The variable dividend yield has positive and significant relationship with trading volume, indicating that one unit change in dividend yield result in 16.67 unit change in trading volume; whereas, the findings of Chen et al. (2013); Felixson and Liljebloom (2008); Graham and Kumar (2006); Green (1980); Koski and Scruggs (1998) have further been validated as these

Table 2: Variance Inflation Factors

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
DY	56.18226	6.339044	1.052221
AR	58.40866	12.0005	4.793277
INST	0.001451	20.6942	1.191839
NRET	4.202227	3.789172	1.215899
PRET	46.67321	7.507956	1.039179
RR	377.7381	13.69276	1.075072
SR	0.464247	8.547042	4.818465
SZ	0.006387	179.0069	1.312598

Table 3: Likelihood Ratio Test: (F test)

Effects Test	Statistic	d.f.	Prob.
Cross-section F	16.36773	(-49,442)	0.000
Cross-section Chi-square	517.3962	49	0.000

studies found positive and significant effect on trading volume. Furthermore, results of the current study suggest the presence of tax induced clientele effect in market. The variable of positive return has positive and significant relationship with trading volume, indicating that one unit change in positive return result in 15.91 unit change in trading volume. And negative return has positive and significant relationship with trading volume, indicating that one unit change in negative return result in 4.046 unit change in trading volume of the companies. Our findings are further validated by [Kumar et al. \(2009\)](#); [Prosad et al. \(2013\)](#); [Statman et al. \(1999\)](#); [Tariq and Ullah \(2013\)](#), as they found significant effect on trading volume.

## 6 Conclusion

This research study explored the relationship between trading volume and its determinants of the fifty (50) high capitalized non-financial firms, which are listed at KSE-100 index in Pakistan. Descriptive statistics is used to get snap shot of data, it includes, mean,

median, standard deviation, minimum and maximum. VIF test is used to test the problem of multicollinearity. Furthermore, we apply panel regression models, in which fixed effect model is selected as final model. The study used trading volume as dependent variable, and Abnormal return, Dividend yield, Institutional holding, Systematic risk, Residual risk, Positive return, Negative return and Size as independent variables.

The variable Abnormal return has negative and significant relationship with trading volume, indicating that low liquidity of stocks have lower turnover in Pakistani market. Dividend yield has positive and significant relationship with trading volume, meaning that announcement of dividends in Pakistani market lead to increase trading activity. Further, institutional ownership has insignificant relationship with trading volume, indicating that in Pakistani market individual investors are more active than institutional investors. Whereas, volatility has positive and significant relationship with volume, stating that both market and company related factors are affecting investor's behavior in market. Moreover, firm size has positive relationship with volume, indicating that in Pakistan larger firms are

Table 4: Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	68.020858	8	0.000

Table 5: Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.16003	3.388543	0.047227	0.9624
AR	-10.1808	5.236604	-1.944161	0.0525
DY	16.67051	6.151176	2.710135	0.007
INST	-0.034508	0.035144	-0.981908	0.3267
SR	1.072415	0.471652	2.273741	0.0235
RR	35.97781	13.4291	2.679094	0.0077
PRET	15.9134	8.265532	1.925273	0.0548
NRET	4.046745	1.61014	2.513288	0.0123
SZ	0.4358	0.14171	3.075296	0.0022
Adjusted R-squared		0.733595		
F-statistic		25.10685		
Prob (F-statistic)		0.000		

more preferred by investors in market. Furthermore, both behavioral factors overconfidence and disposition effect prevail in Pakistani stock market.

## 6.1 Recommendations

Government and regulatory bodies should make certain policies to attract and retain foreign as well as local investors to invest in Pakistan, by examining factors which are affecting investors trading decisions in market. Investors should diversify portfolio by investing in more than one stock, as well as invest in large firms which are providing more stable returns in the form of dividends.

## 6.2 Future Research Directions

The current study chose only those companies which are listed at KSE and excluded every other company. There is no doubt that KSE is biggest stock exchange and is a representative for Pakistani market, however if more stock exchanges are to be included in the study, the result would definitely be more generalize-able in Pakistan. Moreover, the current study did not use the data of financial companies, so in future a comparable study can be conducted where at one end a sample of financial companies can be taken and at other end non-financial companies can be used. This study used only a sample of fifty companies, which can be extended to large sample of companies, in order to generalize the study results. Furthermore, market re-

form of Pakistani stock market, which is merger of three stock exchanges (KSE, LSE, and ISE) into Pakistan stock exchange, can be studied. Another suggestion for future investigation could be to test more observations of the long term and short term variations in trading volume separately.

## References

- Al Samman, H. and Al-Jafari, M. K. (2015). Trading volume and stock returns volatility: Evidence from industrial firms of oman. *Asian Social Science*, 11(24):139.
- Bundoo, S. (2000). The mauritius stock exchange: Sectoral analysis, risk and return. *University of Mauritius Research Journal*, 3(1):81-103.
- Chan, L. K. and Lakonishok, J. (1995). The behavior of stock prices around institutional trades. *The Journal of Finance*, 50(4):1147-1174.
- Chen, G.-m., Firth, M., and Rui, O. M. (2001). The dynamic relation between stock returns, trading volume, and volatility. *Financial Review*, 36(3):153-174.
- Chen, H.-L., Chow, E. H., and Shiu, C.-Y. (2013). Ex-dividend prices and investor trades: Evidence from taiwan. *Pacific-Basin Finance Journal*, 24:39-65.
- Felixson, K. and Liljebloom, E. (2008). Evidence of ex-dividend trading by investor tax category. *The European Journal of Finance*, 14(1):1-21.

- Gervais, S. and Odean, T. (2001). Learning to be overconfident. *Review of Financial studies*, 14(1):1–27.
- Graham, J. R. and Kumar, A. (2006). Do dividend clienteles exist? evidence on dividend preferences of retail investors. *The Journal of Finance*, 61(3):1305–1336.
- Green, J. (1980). Taxation and the ex-dividend day behavior of common stock returns. *NBER Working paper*, 496.
- Hartian, K. R. and Sitorus, R. E. (2015). Liquidity and returns: Evidences from stock indexes around the world. *Asian Economic and Financial Review*, 5(1):33.
- Karpoff, J. M. (1987). The relation between price changes and trading volume: A survey. *Journal of Financial and Quantitative Analysis*, 22(01):109–126.
- Koski, J. L. and Scruggs, J. T. (1998). Who trades around the ex-dividend day? evidence from nyse audit file data. *Financial Management*, pages 58–72.
- Kumar, B., Singh, P., and Pandey, A. (2009). The dynamic relationship between price and trading volume: Evidence from indian stock market.
- Lo, A. W. and Wang, J. (2000). Trading volume: definitions, data analysis, and implications of portfolio theory. *Review of Financial Studies*, 13(2):257–300.
- Majanga, B. B. (2015). The dividend effect on stock price—an empirical analysis of malawi listed companies. *Browser Download This Paper*.
- Mala, R. and Reddy, M. (2007). Measuring stock market volatility in an emerging economy. *International Research Journal of Finance and Economics*, 8(5):53–71.
- Moradi, N. (2015). The relationship between liquidity risk and stock returns. *Jurnal UMP Social Sciences and Technology Management Vol*, 3(3).
- Mubarik, F. and Javid, A. Y. (2009). Relationship between stock return, trading volume and volatility: Evidence from pakistani stock market.
- Nofsinger, J. R. and Sias, R. W. (1999). Herding and feedback trading by institutional and individual investors. *The Journal of finance*, 54(6):2263–2295.
- Prosad, J., Kapoor, S., and Sengupta, J. (2013). Impact of overconfidence and the disposition effect on trading volume: An empirical investigation of indian equity market. *International Journal of Research in Management and Technology*, 3(4):109–116.
- Rehman, A. U., Muhammad, B., Shah, A. S. Z., and Mushtaq, R. (2012). The empirical relationship between risk-return and trading volume in karachi stock exchange. *Journal of Risk and Diversification*, 4:36–43.
- Reilly, F. K. and Brown, K. C. (2002). *Investment analysis and portfolio management*. .
- Shefrin, H. and Statman, M. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *The Journal of finance*, 40(3):777–790.
- Statman, M., Thorley, S., and Vorkink, K. (1999). Investor overconfidence and trading volume. *Review of Financial Studies*, 19(4):1531–1565.
- Statman, M., Thorley, S., and Vorkink, K. (2006). Investor overconfidence and trading volume. *Review of Financial Studies*, 19(4):1531–1565.
- Tariq, B. and Ullah, N. (2013). Investor overconfidence and stock returns: Evidence from pakistan. *IOSR Journal of Business and Management* 8 (1), pages 77–84.
- Tkac, P. A. (1999). A trading volume benchmark: Theory and evidence. *Journal of Financial and Quantitative Analysis*, 34(01):89–114.
- Tripathy, N. (2011). The relation between price changes and trading volume: A study in indian stock market. *Interdisciplinary Journal of Research in Business*, 1(7):81–95.
- Wang, J. (1993). A model of intertemporal asset prices under asymmetric information. *The Review of Economic Studies*, 60(2):249–282.
- Wang, J. (1994). A model of competitive stock trading volume. *Journal of political Economy*, 102(1):127–168.
- Wang, P., Wang, P., and Liu, A. (2005). Stock return volatility and trading volume: Evidence from the chinese stock market. *Journal of Chinese Economic and Business Studies*, 3(1):39–54.

# The Effect of Emotional Intelligence on Turnover Intentions; The Role of Employee Well-being, Engagement and Perceived Organizational Support

M. Waheed Akhtar, Hafiz Ghufuran, Tasneem Fatima\*

*International Islamic University, Islamabad*

---

**Abstract.** This study investigated the mediating role of employee well-being and engagement in the relationship between emotional intelligence and turnover intentions. It also investigated the interactional effect of perceived organizational support in the relationship between emotional intelligence and mediators (employee well-being and engagement). Stratifying simple random sampling technique was used for data collection. 450 questionnaires were distributed among the employees of different banks at Islamabad and Rawalpindi. Data were analyzed through reliability testing, correlation and regression analysis. The results showed that employee well-being and engagement mediate the relationship between emotional intelligence and turnover intentions; whereas, perceived organizational support positively moderates the relationship between emotional intelligence and mediators as well. Managerial implication, limitation and direction for future studies are included in the paper.

---

## 1 Introduction

Researchers from psychology, HRM and OB are focusing on studies related to emotional intelligence (Mayer et al., 2003). In management studies emotional intelligence is the predictor of organizational outcomes (Jordan and Troth, 2011). Emotional intelligence defined as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (Salovey and Mayer, 1990). Bande et al. (2015) stated that emotions are the intrinsic part of workplace but very fewer studies investigated the emotions at workplace. Whereas, in competitive environment organizations need employees and leaders who work effectively, are adaptive in nature, customer focused and constantly focusing on the improvement of process and system.

The level of emotional intelligence (EI) of employees refers to their own perception about their own emotional skills and abilities, personality traits and behavior that help them in managing themselves according to environmental pressure and demands. Many researchers investigated the effect of emotional intelligence on organizational work related outcomes, such as, job performance, job satisfaction, turnover intentions, turnover (Sy et al., 2006; Trivellas et al., 2011). Low level of stress, anxiety, burnout, turnover and well-being is associated with higher level of emotional intelligence (Karimi et al., 2014; Nikolaou and Tsaousis, 2002; Por et al., 2011; Slaski and Cartwright, 2003;

Tsaousis and Nikolaou, 2005).

In today’s environment organizations focus on employee’s well-being in order to enhance employee satisfaction and help the organizations to flourish, grow and change according to environmental demands enabling organizations to compete at international level (Karimi et al., 2014). Well-being defined as “an employee’s quality of life and psychological status at work” (Siegrist and Rödel, 2006). Durán et al. (2004) stated that emotional intelligence enhances the employee’s well-being. When employees are emotionally intelligent, then they are more engaged with their work. Saks (2006) defined employee engagement as “an emotional and intellectual commitment to the organization”. According to Zhu et al. (2015) employee engagement is an outcome of emotional intelligence.

Their study results showed that when employees perceived support from their organizations to be supportive, they feel more attachment to their organization. Perceived organizational support defined as “employee’s perceive their organization either being favorable or unfavorable with the workers and associate it with humanly features” (Eisenberger et al., 1986). Cullen et al. (2014) stated that perceived organizational support has positive impact on job satisfaction and job performance.

In today’s global and competitive environment organizations need competent and intelligent employees to meet environmental challenges, and the retention of those competent employees is the main problem in the organizations. Managers with higher emo-

---

\*Corresponding author.

Email: tasneem.fatima@iiu.edu.pk

tional intelligence need high organizational support so that their satisfaction level will be high, leading to decrease in the intention to quit. Many researchers investigated the relationship between emotional intelligence with turnover intentions (Rahim et al., 2015), employees engagement (Mahon et al., 2014; Pena Garrido and Extremera Pacheco, 2012; Zhu et al., 2015) well being (Agrawal and Khan, 2015; Karimi et al., 2015, 2014), and perceived organizational support (Mahon et al., 2014; ?). There exists a gap in EI literature, particularly the literature on the interactional effect of perceived organizational support with EI and dependent variables, i.e. employee well-being and engagement, while the mediating role of both employee well-being and engagement in the relationship between EI and turnover intentions is also understudied. Therefore, current study aims to fill this gap.

Present study will help the managers in banking sector to understand the role of EI related to employee turnover. Secondly, it will help them to understand the role of employee engagement and well-being related to employee turnover. Thirdly, it will also help the managers to understand the role of organizational support and its effect on employee engagement and well-being. Gaining an insight into the emotional intelligence and perceived organizational support would help individuals in both capacities to increase their engagement at individual level.

## 2 Literature Review

### 2.1 Emotional intelligence and Turnover Intention

Emotional intelligence has been an area for concern for the researchers. The research on the subject has evolved through many years dating back to 1990 when first paper on emotional intelligence was published. In 1990, Salovey and Mayer (1990) defined EI as “the ability of an individual to precisely feel emotions, to access and create emotions in order to support thoughts, to appreciate feelings and emotional knowledge, and to thoughtfully control emotions in order to promote emotional and intellectual development”.

The research on EI has been primarily based on three theoretical models; i.e. “Ability Model” by Mayer (1997); the Emotional - Social Intelligence Model by Bar-On (1997) and the Emotional Competencies Model presented by Goleman (1998). For the purpose of this study ability Model (Mayer, 1997) will be utilized. Mayer (1997) has described EI as “the ability to perceive accurately, appraise, and express emotions; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotions and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth”. The

emotional intelligence theory emphasizes emotional intelligence and the level of job performance of employees. According to this theory, employees with higher emotional intelligence are more satisfied with their job as compared to employees with low emotional intelligence.

Turnover of workforce is defined as “the number of employees that quit within a given time period, usually one year, in relation to the total number of employees” (Sellgren et al., 2007). The intention of workers to leave their current job is both disturbing for managers and organizations for the reason that the employees intending to leave when quitting is a costly affair for the organizations. It requires hiring fresh employees and also adversely affects the services being provided by the organization (Sellgren et al., 2007).

Previous researches established a negative relation between EI and turnover (Carmeli, 2003; Firth et al., 2004; Goleman, 1998; Lee and Liu, 2007). Wong and Law (2002) posited the establishment of negative relationship between emotional intelligence (EI) and turnover intention; thus higher the EI lesser will the employee’s intention to quit. According to Mayer (1997) ability model of emotional intelligence, high level of EI employees show high performance; therefore, employees with higher emotional intelligence have very low intentions to quit. Thus, based on the literature it is hypothesized that:

*H1. Emotional intelligence is negatively associated with turnover intention.*

### 2.2 Employees Well-being as a mediator

The literature available on psychology and sociology have proposed three categories of wellbeing (Grant et al., 2007), comprising physical, social and psychological wellbeing. Psychological wellbeing is studied as the consequence of the hedonism and the eudemonism (Ryan and Deci, 2001). Hedonism is the feeling of employees about their work in organizations which is measured through employee’s job satisfaction (Locke, 1976; Weiss, 2002); whereas, eudemonism refers to employees’ perception that they are able to express their abilities (Wrzesniewski et al., 2003).

Employee well-being may be defined as an employee’s quality of life and psychological status at work (Siegrist and Rödel, 2006). Many researchers have conceived that employees with higher emotional intelligence are more satisfied with their emotional well-being (Goleman, 1995; Salovey and Mayer, 1990; Salovey et al., 1995) and employees who have more control over their emotions have comparatively better perception of life and are considered emotionally healthier. Many researchers investigated the relationship between EI and well-being, while their study results showed that employees scoring high on emotional

intelligence are less prone to depression and unhappiness (Schutte et al., 1998), which leads to higher optimism (Schutte et al., 1998) and more satisfaction with life (Ciarrochi et al., 2000). Therefore, based on the literature it is hypothesized that:

*H2. Emotional intelligence is positively associated with employee wellbeing.*

Earlier researchers found a link between well-being and organizational commitment (Wright and Cropanzano, 2000). According to Brunetto et al. (2012) well-being predicted the police officer's organizational commitment and their intentions to leave current job. Hence it is hypothesized that:

*H3. Wellbeing is negatively associated with turnover intention.*

The relationship between EI and turnover is justified and supported by above arguments; whereas, wellbeing and turnover intentions relationship is justified through previous research and hypothesized in above section. The mediating role of wellbeing in the relationship between EI and turnover intentions is explained with the help of past studies. Brunetto et al. (2012) examined the effect of emotional intelligence upon the job satisfaction, well-being and engagement of police officers in explaining their organizational commitment and turnover intentions and results revealed that EI predicted police officers' perceptions of well-being and job satisfaction, which influenced engagement and affective commitment and, subsequently, negatively affected turnover intentions. Brunetto et al. (2013) investigated the effect of workplace relationships (perceived organizational support, supervisor' nurse relationships and teamwork) on the engagement, well-being, organizational commitment and turnover intentions of nurses working in Australian and USA hospitals and finding suggested that well-being is a predictor of turnover intentions. Hence it is hypothesized that:

*H4. Employee well-being mediates the relationship between EI and turnover intentions.*

### 2.3 Employee Engagement as a mediator

Kahn (1990) defined engagement as a work situation where employees find work meaningful, and consequently, they want to, and can invest in their work to achieve personal and career benefits. Saks (2006) defined employee engagement is that as "an emotional and intellectual commitment to the organization". Brunetto et al. (2012) research on police officers showed that emotional intelligence was the motivational factor for employee's engagement with job sat-

isfaction and well-being as mediator. In the same way, Pena Garrido and Extremera Pacheco (2012) found that emotional intelligence of teachers was associated with higher levels of engagement. According to Zhu et al. (2015) employee engagement is an outcome of emotional intelligence. Based on the above it can be hypothesized that:

*H5. Emotional intelligence is positively associated with employee engagement.*

Recently turnover has become an area of concern for organization as it raises the requirement of hiring and later on training new employees (Thanacoody et al., 2014) and for the reason has evolved greater attention to increase the attachment of employees with the parent organization. Employees who are more engaged with their organization stick to their organization (Shuck and Reio Jr, 2014). On the other hand disengaged employees are more likely to quit parent organizations. Literature review suggests that engagement has an inverse relationship with intention to leave (Saks, 2006). This negative association between work engagement and intention to quit is highlighted by SET (Halbesleben, 2010; Rousseau, 1995). Based on this it can hypothesize that:

*H6. Employee engagement is negatively associated with turnover intentions.*

The relationship between EI and turnover is justified and supported by above arguments; whereas, engagement and turnover intentions relationship is justified through previous research and hypothesized in above section. The mediating role of engagement in the relationship between EI and turnover intentions is explained with the help of past studies. According to Mayer (1997) ability model of emotional intelligence, highly emotionally intelligent employees show high performance so that's why they have high level of engagement. Brunetto et al. (2012) examined the effect of emotional intelligence upon the job satisfaction, well-being and engagement of police officers in explaining their organizational commitment and turnover intentions and the results revealed that EI predicted police officers' perceptions of well-being and job satisfaction, which influenced engagement and affective commitment and, subsequently, negatively affected turnover intentions. Therefore, it can be hypothesized that:

*H7. Employees engagement mediates the relationship between emotional intelligence and turnover intentions.*

## 2.4 Perceived organizational support as a moderator

Perceived Organizational Support (POS) is an organization environment in which it is perceived that the organization will look after the welfare of its employees (Eisenberger et al., 1986; Loi et al., 2006). This perception of employees about an organization's nature depends on the rules and regulations laid down by the organization and the behavior of its representatives (Eisenberger et al., 1986). The Concept of perceived organizational support suggests that employees' perceive their organization either being favorable or unfavorable with the workers and associate it with humanly features (Eisenberger et al., 1986). Employees with higher emotional intelligence and with perception of higher organizational support have higher well-being. Brunetto et al. (2013) investigated the effect of workplace relationships (perceived organizational support, supervisor' nurse relationships and teamwork) on the engagement, well-being, organizational commitment and turnover intentions of nurses working in Australian and USA hospitals and finding suggested that POS is a predictor of well-being.

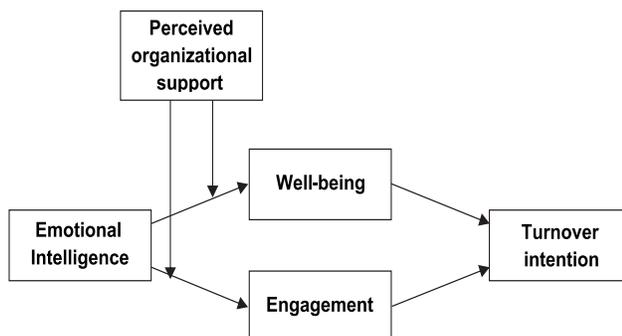


Figure 1: Theoretical framework.

Kurtessis et al. (2015) stated that fewer studies investigated the relationship between POS and employees' subjective well-being. The organizations who promote wellbeing of employees have more chances of positive attitude from its employees. Caesens et al. (2016) investigated the effect of weekly POS on employees' weekly subjective well-being at work in Belgium. Jain et al. (2013) investigated the moderating role of perceived organizational support (POS) in the relationship between stressors and citizenship behavior. Hur et al. (2015) also investigated the moderating role of POS in the relationship between emotional labor strategies and job-related outcomes (i.e. job satisfaction and job performance). Based on the same premise the previous research studies show that perceived organizational support is associated with many positive consequences. Based on this it can be hypothesized

that:

*H8. Perceived organizational support positively moderates the relationship between EI and employee well-being.*

POS is not only associated with the extrinsic benefits of the employees like pays and financial rewards, but is also associated with the confidence, respect and association with the organization (Fuller et al., 2003). Saks (2006) stated that POS predicts employee engagement. Brunetto et al. (2013) investigated the effect of workplace relationships (perceived organizational support, supervisor' nurse relationships and teamwork) on the engagement, well-being, organizational commitment and turnover intentions of nurses working in Australian and USA hospitals. Their findings suggested that POS is a predictor of engagement. In respect of employees and organization association, employees with higher level of EI and employees who perceive higher levels of organizational support; allow employees to utilize their abilities to the best without feeling endangered about their self-esteem, social status, or profession. When employees experience psychological safety, they feel better about their job. Based on this it can be hypothesized that:

*H9. Perceived organizational support positively moderates the relationship between EI and employees engagement.*

## 3 Methodology

In the current study, positivistic quantitative approach has been used for hypotheses testing. Employees are the unit of analysis and data were collected through questionnaire survey among the employees of banking sector in Islamabad and Rawalpindi. Having infinite population, the study used the formula developed by Godden (2004) for the identification of reasonable sample size which turned out to be 384. For data collection after stratifying the population simple random sampling technique has been used.

Stratified random sampling technique was used for data collection. Different strata of samples on the basis of their level such as OG3 and OG2 were made. After developing the strata, simple random sampling technique was applied for data collection. Data were obtained during the period of March 2016 and April 2016, from 450 employees.

450 questionnaires were distributed among employees, out of which only 395 usable questionnaires were returned, with the response rate of 81%. Demographics included age, gender and education. Most of the respondents are below the age of 36 years (80%), 71% of respondents are male and 58% respondents are having the degree of Master.

### 3.1 Instruments

Emotional intelligence has been measured by the sixteen items scales of WLEIS developed by Wong and Law (2002); whereas, perceived organizational support was measured through the short version of Eisenberger et al. (1986). For the measurement of employee engagement nine item scale developed by Schaufeli and Bakker (2003) was employed. Well-being was measured using a four-item scale by Brunetto et al. (2012). For the measurement of turnover intentions four item scale developed by Bludern (1982) was used. The final version of the survey questionnaire was based on five point Likert scale.

## 4 Results

Table (1) shows the results of correlation statistics and the reliability of the variables.

The mean value of emotional intelligence is 3.36, perceived organizational support is 3.35, well-being is 3.06, employee’s engagement is 3.46 and a turnover intention is 2.56. The standard deviation of emotional intelligence is 0.64, perceived organizational support is 0.61, well-being is 0.82, employee’s engagement is 0.80 and the SD of the turnover intention is .86, as per table

(1).

Emotional intelligence is positively correlated with perceived organizational support (0.66\*\*), well-being (0.68\*\*), employees engagement (0.70\*\*) and negatively correlated with turnover intentions (-0.69\*\*). Perceived organizational support is positively correlated with well-being (0.70\*\*), employees engagement (0.64\*\*) and negatively correlated with turnover intentions (0.67\*\*). Well-being is positively correlated with employees engagement (0.46\*\*) and negatively correlated with turnover intentions (-.64\*\*). Employees engagement negatively correlated with turnover intentions (-.64\*\*).The level of significant reliability is 0.70 which is recommended by Nunnally (1978) and this level was also recommended by Ndubisi (2006). The reliability of Emotional intelligence is (.817) perceived organizational support (.83), well-being (.82), employees engagement (.72) and negatively correlated with turnover intentions (.70).

Results of KMO and Bartlett’s test reveals that variables are highly significant and principal component analysis was suitable for data shown in table 2.

Hypothesis 1 stated that emotional intelligence has a negative impact on turnover intentions. The result shows that emotional intelligence negatively associated with turnover intentions (p = .000 less than .05,  $\beta = -$

Table 1: Correlation, Descriptive Statistics and Reliability

	Mean	SD	EI	POS	WB	EE	TOI
EI	3.36	.64	(.817)				
POS	3.35	.61	.655**	(.838)			
WB	3.06	.82	.677**	.702**	(.828)		
EE	3.46	.80	.695**	.639**	.468**	(.723)	
TOI	2.56	.86	-.687**	-.675**	-.647**	-.637**	(.695)

\*\*Correlation is significant at the 0.01 level (2-tailed). N=395.  
 EI= emotional intelligence, POS = perceived organizational support, WB= well-being, EE= employee engagement, TOI= turnover intentions

Table 2: KMO and Bartlett’s Test

Kaiser-Meyer-Olkin	Measure of Sampling Adequacy	.851
Bartlett’s Test of Sphericity	Approx. Chi Square	2103.872
	Df	91
	Sig.	0.000

Table 3: Rotated component matrix

	Component				
	1	2	3	4	5
EM1	.675				
EM2					
EM3	.725				
EM4					
EM5					
EM6	.747				
EM7	.459				
EM8	.633				
EM9	.784				
EM10	.849				
EM11	.598				
EM12	.517				
EM13					
EM14					
EM15	.498				
EM16					
POS1			.438		
POS2			.611		
POS3			.804		
POS4			.821		
POS5			.585		
POS6			.612		
POS7			.823		
POS8			.666		
WB1		.652			
WB2		.597			
WB3		.642			
WB4		.442			
EE1					
EE2					.737
EE3	.618				
EE4	.483				
EE5	.746				
EE6	.684				
EE7	.662				
EE8	.938				
EE9					
TOI1					.508
TOI2					.489
TOI3					.538
TOI4					0.602

*Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.a. Rotation converged in 43 iterations.*

.65), which substantiated the hypothesis 1. These results are in accordance with pervious study (Carmeli, 2003; Firth et al., 2004; Goleman, 1998; Lee and Liu, 2007).

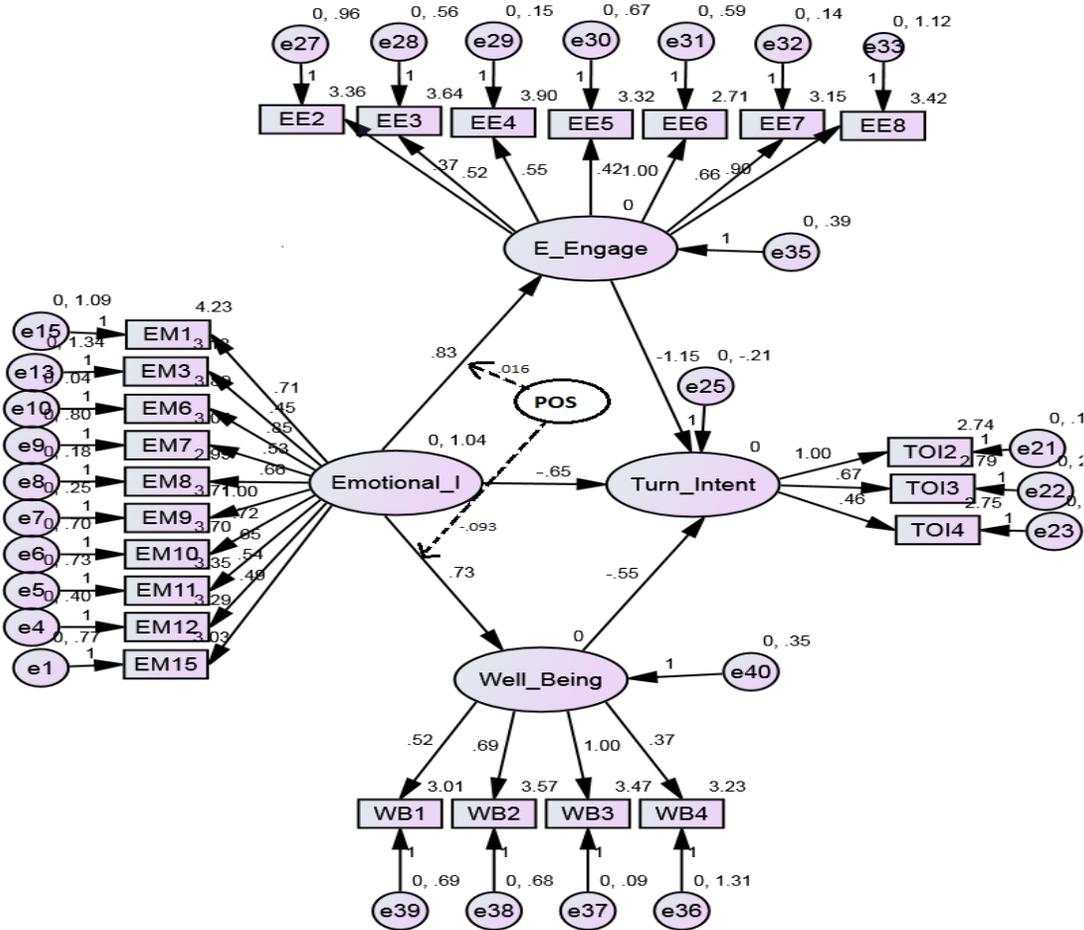


Figure 2: Path diagram.

Hypothesis 2 stated that emotional intelligence has a positive impact on employee well-being. The results shows that emotional intelligence have positive impact on employee well-being ( $p = .000$  less than  $.05$ ,  $\beta = .73$ ). So our hypothesis two was substantiated. These result are according with pervious study (Ciarrochi et al., 2000; Goleman, 1995; Salovey and Mayer, 1990; Salovey et al., 1995).

Hypothesis 5 stated that EI have positive impact on employee engagement. The results shows that EI have positive impact on employee engagement ( $p = .000$  less than  $.05$ ,  $\beta = .83$ ). So our hypothesis five was substantiated. These results are also in accordance with pervious study (Pena Garrido and Extremera Pacheco, 2012; Saks, 2006; Zhu et al., 2015).

Results show that employee engagement mediates the relationship between emotional intelligence and turnover intentions in banking sector. Because emotional intelligence ( $p = 0.000$ ,  $\beta = -.65$ ) negatively impacts turnover intentions. Employee engagement ( $p = 0.000$ ,  $\beta = -1.15$ ) mediates the relationship between emotional intelligence ( $p = 0.000$ ) and turnover intentions. So hypothesis 6 and 7 were substantiated. If banking sectors employees are highly emotional intelligent then their

engagement level is high from their jobs, subsequently decreasing their intentions to quit. And if employees have low emotional intelligence, then their engagement level is low, leading to higher intentions to quit. Path analysis was also run. Figure 2 show that Emotional intelligence has a positive effect on well-being and engagement, and negative effect on turnover intentions. Moreover, well-being and engagement have negative effect on turnover intentions. Therefore, well-being and engagement mediate the relationship between EI and turnover intentions.

Results also show that employee well-being mediates the relationship between emotional intelligence and turnover intentions in banking sector. Because emotional intelligence ( $p = 0.000$ ,  $\beta = -.65$ ) negatively impact on turnover intentions. Employee well-being ( $p = 0.000$ ) mediates the relationship between emotional intelligence ( $p = 0.000$ ,  $\beta = -.55$ ) and turnover intentions. So our hypothesis 3 and 4 were substantiated. If banking sectors employees are highly emotional intelligent then their well-being (satisfied) level is high from their jobs then their intentions to quit are low. And if employees have low emotional intelligent then their well-being (satisfied) level is low from their jobs then their

Table 4: Standard estimation of the main Model

Standard Regression Weights	S.E.	C.R.	P
H2 Well_Being<- Emotional_I	0.73	3.26	0.000
H1 Turn_Intent<-Emotional_I	-0.65	2.34	0.000
H5 E_Engage<-Emotional_I	0.83	4.56	0.000
H3 Turn_Intent<-Well_Being	-0.55	3.45	0.000
H6 Turn_Intent<-E_Engage	-1.15	4.17	0.000
H4 Turn_Intent<-Well_Being<-Emotional_I			0.000
H7 Turn_Intent<-E_Engage<-Emotional_I			0.000

Table 5: Fit measures

Fit measure	Main Model
X2	85.064
Degree of Freedom(df)	38
Root Mean Square Residual(RMR)	0.049
Goodness-of-fit Index(GFI)	0.9678
Adjusted Goodness-of-fit Index(AGFI)	0.944
Comperative Fit Index(CFI)	0.97
Root Mean Square Error of Approximation (RMSEA)	0.049

*GFI: The goodness of fit index, tells you what proportion of the variance in the sample variance covariance matrix is accounted for by the model. This should exceed 0.9 for a good model. AGFI: Adjusted GFI is an alternate GFI index in which the value of the index is adjusted for the number of parameters in the model. Few numbers of parameters in the model relative to the number of data points. The structural equation model was examined to test the relationship among constructs. Goodness of fit indicates for this model were GFI = 0.9678, AGFI = 0.944, CFI = 0.97, RMR = 0.0497. Figure 1.1 depicts the full model. Of the 6 paths hypothesized in the model, all the paths were significant at  $p < 0.01$ .*

Table 6: Moderating role of perceived organizational support

Predictor	Dependent: WB			Dependent: EE		
	Beta	R <sup>2</sup>	$\Delta R^2$	Beta	R <sup>2</sup>	$\Delta R^2$
Moderation: POS						
Step 1						
Control variables	.13***	0.39		.161***	0.001	
Step 2						
E	.315***	0.86	0.47	.635***	0.88	0.87
POS	.392***			.340**		
Step 3						
Interaction term	-.093***	0.9	0.04	.016***	0.89	0.01

intentions to quit are high.

## 4.1 Moderating role of perceived organizational support

Perceived organizational support moderates the relationship between independent (emotional intelligence) and dependent variables (well-being, employees engagement). We perform each moderation analysis one by one.

To test H8 we centered round all variables on their means. In step 2 we entered EI entered, in step 3 we entered EI and perceived organizational support together and in step 4 we entered interaction term EPOS (EI\*POS) keeping employee well-being (WB) as dependent variable. Results in Table 5 revealed that EI and perceived organizational support are significant predictor of WB ( $\beta = 0.315$ ,  $p = 0.000$  to  $\beta = 0.392$ ,  $p = 0.000$ ) respectively. Value of  $\beta$  shows that higher level of perceived organizational support, the WB will be even higher as results. By adding the interaction term we found ( $\Delta R^2 = 0.04$ ,  $p = 0.000 < 0.05$ ) the p value are less than 0.05 and significant. So the hypothesis 8 is substantiated; i.e. perceived organizational support positively moderates the relationship between emotional intelligence and employee well-being.

To test H9 we centered round all variables on their means. In step 2 we entered EI entered, in step 3 we entered EI and perceived organizational support together and in step 4 we entered interaction term EPOS (EI\*POS) keeping employee engagement (EE) as dependent variable. Results in Table 6 revealed that EI and perceived organizational support are significant predictor of EE ( $\beta = 0.63$ ,  $p = 0.000$  to  $\beta = 0.34$ ,  $p = 0.000$ ) respectively. Value of  $\beta$  shows that higher level of perceived organizational support, the EE will be even higher as results. By adding the interaction term we found ( $p = 0.01 < 0.05$ ) and the p value is less than 0.05 and significant. So the hypothesis 9 was substantiated, i.e. perceived organizational support positively moderates the relationship between emotional intelligence and employee engagement.

## 5 Conclusion

Present study has four main objectives. First perceived organizational support positively moderates the EI and employee engagement relationship, secondly perceived organizational support positively moderates the EI and employee well-being relationship, thirdly employee engagement mediates the EI and turnover intentions relationship and lastly employee well-being mediates the EI and turnover intentions relationship.

The outcomes of the study are a proof for the nomological validation of the EI and workplace incivility perceptions constructs. Nomological validity refers to correlations between constructs in accordance with some established theory [Cronbach and Meehl \(1955\)](#).

Current study investigated the path relationship from banks employees' emotional intelligence to employee well-being, engagement and finally turnover intentions; and further investigated how perceived organizational support has interactional effect between EI and mediators (engagement and well-being). This article indicates that EI must be included in retention strategies because of its impact on employee's turnover intentions. The findings suggest that emotional intelligence level of banking sector employees in Islamabad affects their engagement and well-being level, and their engagement and well-being level have effects on their turnover intentions, while perceived organizational support has interactional effects on the relationship between EI, engagement and well-being. Present study highlight the complex role of EI plays in turnover intentions.

## 5.1 Managerial implications

The current research stated that EI may be effectively used in banking sector. It further throws light on the significance of monitoring of work experiences by banks employees and recognizes the effect of EI on employee's well-being (satisfaction) and engagement, which in turn influences their intention to leave. It also identifies the link between EI and turnover intentions. It is central to existing banking sector, as retaining most experiences, valuable and trained employees are important for achieving desired outcomes in banks. From research we can find that turnover can cost up-to 93 to 200 percent of leaving workers annual payments ([Griffet& Horn, 2001](#)); and in customer service industries the rate of turnover is particularly high ([Korczyński, 2002](#)).

While making policies for human resource management practices, the EI aptitude of bank employees may be considered during hiring and development process. In order to enhance retention, well-being and employee engagement consequences might be weighed. Along with, resource effective services, the top management should also visualize the outcome of selection of highly emotionally intelligent employees; as there are more chances of them performing a few assignments in a better way. The management may also think about training bank employees in order to appreciate the manner in which their behavior affects other employees. The organizations must arrange training session for their employees how to manage their emotions at work ([Parkinson and Totterdell, 1999](#); [Totterdell and Parkinson, 1999](#)). Their work has seen the difference between two main categories of strategies. One that deals with the current mood and challenges, like reappraisal or social support, the engagement strategy; on the other hand, diversion strategy that concentrates away from the existing condition like avoidance. The research concluded that participants who were told to

make use of engagement strategies displayed more optimistic moods and were able to face emotional demands in a better way. The findings of the study suggest that by training workers on use of specified strategies for managing their emotion, may show positive results in future.

## 5.2 Limitations and Future Directions

Present study used cross sectional data for analysis; more variance could be found if our collected data were longitudinal in nature; as there is always a room for improvement. Present study investigated the effect of EI on employee's engagement, employee well-being and turnover intentions: perceived organizational support as a moderator between EI and mediating variables relationship (employee engagement, employee well-being), used simple random sampling method, limited sample size was used and was conducted in banking sector. The study needs to be more comprehensive and may be examined with larger sample size. More industries could have been studied and comparisons among different sectors emotional intelligence impact on employee engagement, employee well-being and turnover intentions may have been seen. More researchers may also study the mediating roles of Well-being and engagement in the relationship between EI and organizational outcomes (job performance, organizational citizenship behavior and job satisfaction).

## References

- Agrawal, N. and Khan, M. S. (2015). Roles of emotional intelligence and spirituality on employees well-being.
- Bande, B., Fernández-Ferrín, P., Varela, J. A., and Jaramillo, F. (2015). Emotions and salesperson propensity to leave: The effects of emotional intelligence and resilience. *Industrial Marketing Management*, 44:142–153.
- Bar-On, R. (1997). *Baron emotional quotient inventory*. Toronto: Multi-Health Systems.
- Brunetto, Y., Teo, S. T., Shacklock, K., and Farr-Wharton, R. (2012). Emotional intelligence, job satisfaction, well-being and engagement: explaining organisational commitment and turnover intentions in policing. *Human Resource Management Journal*, 22(4):428–441.
- Brunetto, Y., Xerri, M., Shriberg, A., Farr-Wharton, R., Shacklock, K., Newman, S., and Dienger, J. (2013). The impact of workplace relationships on engagement, well-being, commitment and turnover for nurses in australia and the usa. *Journal of Advanced Nursing*, 69(12):2786–2799.
- Caesens, G., Marique, G., Hanin, D., and Stinglhamber, F. (2016). The relationship between perceived organizational support and proactive behaviour directed towards the organization. *European Journal of Work and Organizational Psychology*, 25(3):398–411.
- Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers. *Journal of managerial Psychology*, 18(8):788–813.
- Ciarrochi, J. V., Chan, A. Y., and Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences*, 28(3):539–561.
- Cronbach, L. J. and Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological bulletin*, 52(4):281.
- Cullen, K. L., Edwards, B. D., Casper, W. C., and Gue, K. R. (2014). Employees adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. *Journal of Business and Psychology*, 29(2):269–280.
- Durán, A., Extremera, N., and Rey, L. (2004). Self-reported emotional intelligence, burnout and engagement among staff in services for people with intellectual disabilities. *Psychological Reports*, 95(2):386–390.
- Eisenberger, R., Huntington, R., Hutchinson, S., and Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71:500–507.
- Firth, L., Mellor, D. J., Moore, K. A., and Loquet, C. (2004). How can managers reduce employee intention to quit? *Journal of managerial psychology*, 19(2):170–187.
- Fuller, J. B., Barnett, T., Hester, K., and Relyea, C. (2003). A social identity perspective on the relationship between perceived organizational support and organizational commitment. *The Journal of Social Psychology*, 143(6):789–791.
- Godden, B. (2004). Sample size formulas. Retrieved on December, 3:2013.
- Goleman, D. (1995). Emotional intelligence, why it can matter more than iq. Technical report.
- Goleman, D. (1998). *Working with emotional intelligence* bloomsbury.
- Grant, A. M., Christianson, M. K., and Price, R. H. (2007). Happiness, health, or relationships? managerial practices and employee well-being tradeoffs. *The Academy of Management Perspectives*, 21(3):51–63.
- Halbesleben, J. R. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. *Work engagement: A handbook of essential theory and research*, 8:102–117.
- Hur, W.-M., Han, S.-J., Yoo, J.-J., and Moon, T. W. (2015). The moderating role of perceived organizational support on the relationship between emotional labor and job-related outcomes. *Management Decision*, 53(3):605–624.
- Jain, A., Giga, S., and Cooper, C. (2013). Perceived organizational support as a moderator in the relationship between organisational stressors and organizational citizenship behaviors. *International Journal of Organizational Analysis*, 21(3):313–334.

- Jordan, P. J. and Troth, A. (2011). Emotional intelligence and leader member exchange: The relationship with employee turnover intentions and job satisfaction. *Leadership & Organization Development Journal*, 32(3):260–280.
- Karimi, L., Cheng, C., Bartram, T., Leggat, S. G., and Sarkeshik, S. (2015). The effects of emotional intelligence and stress-related presenteeism on nurses well-being. *Asia Pacific Journal of Human Resources*, 53(3):296–310.
- Karimi, L., Leggat, S. G., Donohue, L., Farrell, G., and Couper, G. E. (2014). Emotional rescue: the role of emotional intelligence and emotional labour on well-being and job-stress among community nurses. *Journal of advanced nursing*, 70(1):176–186.
- Korczynski, M. (2002). Human resource management in the service sector.
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., and Adis, C. S. (2015). Perceived organizational support a meta-analytic evaluation of organizational support theory. *Journal of Management*, page 0149206315575554.
- Lee, H.-W. and Liu, C.-H. (2007). An examination of factors affecting repatriates' turnover intentions. *International Journal of manpower*, 28(2):122–134.
- Locke, E. (1976). The nature and cause of job satisfaction in dunnette, marvin d. *Handbook of Industrial & Organizational Psychology*. Chicago: Raud McNally College Publishing Co.
- Loi, R., Hang-Yue, N., and Foley, S. (2006). Linking employees' justice perceptions to organizational commitment and intention to leave: The mediating role of perceived organizational support. *Journal of Occupational and Organizational Psychology*, 79(1):101–120.
- Mahon, E. G., Taylor, S. N., and Boyatzis, R. E. (2014). Antecedents of organizational engagement: exploring vision, mood and perceived organizational support with emotional intelligence as a moderator.
- Mayer, J. (1997). What is emotional intelligence? en p. salovey y d. sluyter (eds.). emotional development and emotional intelligence: implications for educators (pp. 3-31).
- Mayer, J. D., Salovey, P., Caruso, D. R., and Sitarenios, G. (2003). Measuring emotional intelligence with the msceit v2. 0. *Emotion*, 3(1):97.
- Ndubisi, N. O. (2006). A structural equation modelling of the antecedents of relationship quality in the malaysia banking sector. *Journal of Financial Services Marketing*, 11(2):131–141.
- Nikolaou, I. and Tsaousis, I. (2002). Emotional intelligence in the workplace: Exploring its effects on occupational stress and organizational commitment. *The International Journal of Organizational Analysis*, 10(4):327–342.
- Nunnally, J. (1978). Psychometric methods.
- Parkinson, B. and Totterdell, P. (1999). Classifying affect-regulation strategies. *Cognition & Emotion*, 13(3):277–303.
- Pena Garrido, M. and Extremera Pacheco, N. (2012). *Inteligencia emocional percibida en el profesorado de Primaria y su relación con los niveles de burnout e ilusión por el trabajo (engagement): Perceived Emotional Intelligence in Primary School Teachers and Its Relationship with Levels of Burnout and Engagement*. Ministerio de Educación.
- Por, J., Barriball, L., Fitzpatrick, J., and Roberts, J. (2011). Emotional intelligence: Its relationship to stress, coping, well-being and professional performance in nursing students. *Nurse education today*, 31(8):855–860.
- Rahim, M. A., Civelek, I., and Liang, F. H. (2015). A model of department chairs' social intelligence and faculty members' turnover intention. *Intelligence*, 53:65–71.
- Rousseau, D. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Sage Publications.
- Ryan, R. M. and Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, 52(1):141–166.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*, 21(7):600–619.
- Salovey, P. and Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, 9(3):185–211.
- Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., Palfai, T. P., et al. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the trait meta-mood scale. *Emotion, disclosure, and health*, 125:154.
- Schaufeli, W. and Bakker, A. (2003). Utrecht work engagement scale: Preliminary manual. utrecht occupational health psychology unit, utrecht university.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., and Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and individual differences*, 25(2):167–177.
- Sellgren, S., Ekvall, G., and Tomson, G. (2007). Nursing staff turnover: does leadership matter? *Leadership in Health Services*, 20(3):169–183.
- Shuck, B. and Reio Jr, T. G. (2014). Employee engagement and well-being: A moderation model and implications for practice. *Journal of Leadership & Organizational Studies*, 21(1):43–58.
- Siegrist, J. and Rödel, A. (2006). Work stress and health risk behavior. *Scandinavian journal of work, environment & health*, pages 473–481.
- Slaski, M. and Cartwright, S. (2003). Emotional intelligence training and its implications for stress, health and performance. *Stress and health*, 19(4):233–239.

- Sy, T., Tram, S., and OHara, L. A. (2006). Relation of employee and manager emotional intelligence to job satisfaction and performance. *Journal of vocational behavior*, 68(3):461–473.
- Thanacoody, P., Newman, A., and Fuchs, S. (2014). Affective commitment and turnover intentions among health-care professionals: The role of emotional exhaustion and disengagement. *The International Journal of Human Resource Management*, 25(13):1841–1857.
- Totterdell, P. and Parkinson, B. (1999). Use and effectiveness of self-regulation strategies for improving mood in a group of trainee teachers. *Journal of occupational health psychology*, 4(3):219.
- Trivellas, P., Gerogiannis, V., and Svarna, S. (2011). The impact of emotional intelligence on job outcomes and turnover intention in health care. *ICININFO-2011, Advances on Information Processing and Management (AIPM)*, 1:356–360.
- Tsaousis, I. and Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and health*, 21(2):77–86.
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human resource management review*, 12(2):173–194.
- Wong, C.-S. and Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The leadership quarterly*, 13(3):243–274.
- Wright, T. A. and Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of occupational health psychology*, 5(1):84.
- Wrzesniewski, A., Dutton, J. E., and Debebe, G. (2003). Interpersonal sensemaking and the meaning of work. *Research in organizational behavior*, 25:93–135.
- Zhu, Y., Liu, C., Guo, B., Zhao, L., and Lou, F. (2015). The impact of emotional intelligence on work engagement of registered nurses: the mediating role of organisational justice. *Journal of clinical nursing*, 24(15-16):2115–2124.

## CONTRIBUTOR'S GUIDELINES

---

### **Abstract.** .

The management of Jinnah Business Review (JBR) encourages researchers to prepare their articles in accordance with the following guidelines and submit their manuscripts online, preferably. Before submitting your articles online, you will have to transform your article in to our Journals template; and for this purpose, you can use a specimen provided for the article on our research center's website ([www.jbrc.pk](http://www.jbrc.pk)) as a base. .

---

## AIMS AND SCOPE

Jinnah Business Review (JBR) is the academic research journal of the Jinnah Business Research Center of Capital University of Science and Technology, Islamabad (Pakistan). The Journal publishes theoretical and empirical research papers in management, finance, human resource management, marketing and economics, and all other related disciplines of management and social sciences. Its primary focus is on empirical studies with an emphasis on the policy relevance of the findings.

JBRs goals are to inform the academic, business, and public policy communities of the results of relevant current research; to provide expert analysis of current events and reviews of literature in the field; and to add to the business literature material suitable for academics, executives, and professionals.

New innovative concepts, ideas and practices about businesses, industry, and management related disciplines are therefore welcomed. The submitted articles are undergone through a two-tiered review; the first evaluation is carried out by the JBR Editorial Advisory/Working Committee consisting of members from each relevant discipline, and the second review by peer referees and experts working in the related fields in Pakistan and abroad.

## INSTRUCTIONS FOR AUTHORS

The Editors welcome preliminary inquiries about manuscripts for possible publication. There is no standard fixed length for articles, but a 15 20 A4 pages, with 12-fonts and 1-line space article would suffice. Manuscripts should be prepared according to the following style rules (deviations from these rules can cause publication delays).

## ***Content, Length, and Formatting***

It is the author's responsibility to make the submitted paper readable, relevant, and interesting, before submission and consideration by referees. This require.

### ***Length***

All submitted papers must be formatted according to the instructions below, and must be no more than 15 20 US letter pages, as defined earlier. This page limit includes all parts of the paper: title, abstract, body, bibliography, appendices and tables.

### ***Abstract***

An abstract not exceeding 250 words comprising the following is required in the following format:

Authors name (s) and affiliation

- a) Email address
- b) Title and abstract content

The abstract content should clearly state:

- a) Research questions and/or objectives
- b) Methodology
- c) Scope of investigation/findings

### ***Full paper***

- a) A4 size paper
- b) Margins must be 1 inch on all sides
- c) Font size 12 Times New Roman (body text)
- d) Title, subtitles, abstract and references single spaced; body text 1  $\frac{1}{2}$  - line spaced
- e) Referencing, graphics & tables will be considered in the total page count.
- f) Do not include page numbers, header & footer.
- g) Maximum 15 20 pages
- h) Other formatting details see next section

## ***Tables and Figures***

- a) All unessential tables and figures should be eliminated.
- b) Tables must be submitted in Microsoft Word table format, and should be created using Times New Roman text, 10 point size. APA-style provided elsewhere must be preferred.
- c) Figures must be clearly produced in black and white. All text included in figures should be Times New Roman (10 point minimum).
- d) Each table and figure should fit on a single page. Tables and figures may be oriented horizontally (landscape) or vertically (portrait) within the allotted space.
- e) Each table and figure should be submitted on a separate sheet and identified with a table or figure number and a descriptive title.
- f) Legends and titles on tables and figures must be sufficiently descriptive such that they are understandable without reference to the text.
- g) For data not generated by the author(s), the source of the data should be given (in short form) below the table or figure and listed in full in the references.
- h) Every table and figure must be referred to in the text. Each table and figure will appear in the journal after its first mention in the text.

## ***File type***

All papers are to be submitted as a single MS WORD file, formatted for 8.5" x 11" paper. It is essential that submitted papers print without difficulty on a variety of printers.

## ***Anonymity Requirements for Double-Blind Reviewing***

All research papers submitted to JBR will undergo a "double-blind" reviewing process: the program committee members and referees who review the paper will not know the identity of the authors. To ensure anonymity of authorship, authors must prepare their manuscript as follows:

- a) Authors' names and affiliations must not appear on the title page or elsewhere in the paper.
- b) You must also use care in referring to related past work, particularly your own, in the paper. The following types of statements must be avoided:  
 In our previous work [1,2], we presented two algorithms for ——— In this paper, we build on that work by ——— .

## ***Footnotes and References***

- a) Footnote material should be incorporated into the text whenever possible. If footnotes are necessary, the note number should be typed in the text and superscripted. The notes should be collected at the end of the text as endnotes.
- b) References should be (a) integrated into the text in short form and (b) collected together at the end of the article. APA format needs to be followed.

*i) In-text, citations should be placed in parentheses and noted as follows:*

For book or academic journal - (last name of author[s], date); such as: (Hill, 1988); (Beatty, 1989; Feltham, et al. 1991; Leland & Pyle, 1977).

If no author, cite journal, institution, or publisher. For works with three or more authors, list the first author followed by et al. as shown above. For multiple citations, alphabetize citations by first authors last name.

*ii) The full bibliographic information in the references should be composed as follows:*

For book - author[s]. year. book title. edition number [if applicable]. location: publisher. Such as: Yin, R.K. (2003). *Case Study Research: Design and Methods*. 3rd Edition. Thousand Oaks, California: Sage Publications, Inc.

For edited volume editor[s] (ed[s]). year. book title. edition number [if applicable]. location: publisher.

Such as: Nelson, R.R.(ed.)(1993). *National Systems of Innovations: A Comparative Analysis*. Oxford: Oxford University Press.

For chapter in edited volume - author[s]. year. chapter title. in editor[s] (ed[s]). book title, pp. chapter page numbers. location: publisher.

Such as: Groenewegen, John and Jack Vromen (1997). *Theory of the firm revisited: New and neo-institutional perspectives*. In Lars Magnusson and Jan Ottosson (eds.) *Evolutionary Economics and Path Dependence*, pp. 33-56. Cheltenham, UK: Edward Elgar.

For article in academic journal - author. year. article title. journal title. volume number (issue number): page numbers.

Such as: Black, J. S., Gregersen, H. B. & Mendenhall, M.E. (1992). *Toward a Theoretical Framework of Repatriation Adjustment*. *Journal of International Business Studies* 23 (4): 737-760.

The author(s) should make sure that there is a strict one-to-one correspondence between the in-text citations (including citations in footnotes, tables, and figures) and the list of references in the References.

### ***Copy Preparation***

JBR accepts manuscripts via internet or post or e-mail. All hard-copy submissions must be accompanied by a disk or CD containing an electronic version of the manuscript. The manuscript should be prepared using a recent version of Microsoft Word and should utilize standard fonts and symbols. Ideally, such a manuscript should be formatted with regard to the following guidelines:

- a) Do not use tabs except in tables.
- b) Do not indent block quotations.

- c) Do not hyphenate or otherwise break words across lines.
- d) Use headings sparingly and logically. Do not use more than three levels of headings. Use consistent formatting for each heading level employed.

### ***Copyright Transfer***

- a) Submission of a paper will be held to imply that it contains original unpublished work and is not being submitted for publication elsewhere.
- b) Submission of a paper also implies that, upon acceptance of an article by the journal, the author(s) will transfer copyright of the article to the publisher. The transfer will ensure the widest possible dissemination of information.
- c) It is understood that submission of the paper for publication has been approved by all of the authors and by the institution where the work was carried out; it is further understood that any person cited as a source of personal communications has approved such citation.

### ***Miscellaneous***

- a) Papers must be in English. Use American spelling instead of British (e.g., labor, not labour). Use the American terms such as billion (one billion = 1,000,000,000; one trillion = 1,000,000,000,000), rather than lakhs and crores.
- b) Spell out all numbers from one to ninety-nine, unless:
  - i) *the number contains a decimal point, e.g., 6.2 and 0.12.*
  - ii) *the number precedes a percent sign or a unit of measure, e.g., 47% and 16m.*
- c) Italicize and define non-English words at their first occurrence; at subsequent occurrences, format the word in roman (no italicized) type.
- d) A short abstract of the paper should always be included with the submission.
- e) Please keep a copy of everything sent to JBR, both hard copy and electronic copy, and bear in mind that the electronic version received at JBR will be considered the master copy. The Editors do not accept responsibility for damage to or loss of submitted papers or electronic media.
- f) A short note listing each authors institutional affiliation, current address, telephone numbers, e-mail address, and other relevant biographical information, including publications and a photograph should be provided.
- g) Any manuscript that does not conform to the above instructions may be returned for the necessary revision before publication.
- h) Each author is entitled to one copy of the issue in which his or her article appears.

### **Note:**

Editor reserves the right to amend, abridge or otherwise alter the contents of the paper to make it suitable for publication. However every endeavor will be made not to affect the spirit or effectiveness of the paper.



**JINNAH**

BUSINESS RESEARCH CENTER

**Capital University of Science and Technology**

Islamabad Expressway, Kahuta Road, Zone-V,  
Islamabad, Pakistan

ISSN 2070-0296



9 772070 029007