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# JINNAH BUSINESS REVIEW

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towards Project Success

Impact of Ethical Leadership on Followers'  
Organizational Deviance, Mediating Role of  
Psychosocial Safety Climate, Moderating Role of Union  
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with Mediating Role of Creativity and Moderating Role  
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Impact of Ethical Leadership on Employee Creativity:  
Mediating Role of Trust and Moderating Role of  
Creative Self Efficacy

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# **ROLE OF EFFECTIVE DIVERSITY MANAGEMENT PRACTICES TOWARDS PROJECT SUCCESS**

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## **ABSTRACT**

**This study evaluated the role of effective diversity management practices towards the success of the project in both government and private sector organizations of Pakistan, with the mediating role of project efficiency. Data were collected from 100 respondents working in government/private sector organizations in Pakistan; using questionnaires, based on 5 point likert scale. The results of this study confirmed that there is a positive relation between diversity management practices and project efficiency. Also it is confirmed that the project's success and efficiency are positively linked with each other and effective diversity management practices in Pakistan do help project managers in leading the projects towards success. The study concluded that in country like Pakistan, having a masculine culture, masculinity acts as a moderator, to strengthen the relationship between project efficiency and project success. Implications and strategies to address the issues on Pakistani context are also discussed.**

## **INTRODUCTION**

According to Dulaimi and Hariz (2011) diversity plays an essential role in the overall success of the project team, however managing the diverse teams is a complex task. In this competitive business world most of the business organizations seek to make it a mainstream issue so that they can address legal obligations and complete their projects in an efficient manner (Popescu et al, 2014). Henderson and Stackman (2010) state that during past few decades, the project management field was mainly a male dominated field, however in the past decade women have significantly gained prominence as scholars, practitioners and teachers and both men and women are now redefining the overall typical image of the project manager and expanding the skills of the project managers required to function effectively in this rapidly changing technologically advanced business world.

In his study Anbari et al (2009) has found that there are numerous diverse benefits that can be attained by the project management teams while increasing the awareness and managing the diversity throughout the project. Most of the project managers have now recognized the importance of effective diversity management practices to their team members because it significantly increases the overall productivity and efficiency of the team leading to successful project (Turner et al, 2010). Rodrigues and Sbragia (2013)

have explained that it is necessary for a project manager to identify and understand different types of diversity present in his or her team, so that he or she can capitalize those individual differences in order to improve the team's success. Moreover, after identifying the unique capabilities of individuals in the team, a project manager can easily encourage his/her team members to become aware of these diverse qualities and appropriately use them to accomplish team goals (Popescu et al., 2014).

As discussed above, managing the diversity efficiently helps project managers in attaining the ultimate goals of the project, while developing strong relations between the diverse team members and attaining team goals in an efficient manner. There are numerous different diversity management practices that help project managers in managing the diverse team during a certain project and to increase the productivity level of team members to attain the ultimate goals of the project collaboratively. As discussed by Ochieng and Price (2009) that there are various potential benefits that can be attained by the project managers by managing a highly diverse teams. However, there are different factors that help project managers in increasing the overall efficiency of the employees and increase their performance and productivity. Hence this research intends to evaluate the strategies and practices that can be helpful for the project managers in managing the culturally diverse teams for their projects. Also, this

research focuses on evaluating the factors like effective flow of communication, relations between employees etc. that help project managers in increasing the overall efficiency of the employees working in team for the successful completion of the project.

The research focuses on evaluating the factors that increases the overall efficiency of the team members during projects and influence their performance and productivity. Furthermore, detailed overview of the effective management practices that can be used by the project managers to keep the team composed of diverse employees motivated for the efficient completion of the project. The major reason behind selection of this topic was the increasing importance of diverse workforce because diverse teams have enhanced innovation and creativity which occurs because of the broader range of background inherent and unique experiences of the culturally diverse team members (Shen et al., 2009).

## LITERATURE REVIEW

### Diversity Management in Project

Shen et al (2009) said that when we talk about project manager, first thing that comes to our mind is the captain of the ship who is going to start his journey from the very beginning. Ozbilgin and Tatli (2008) state that it all depends upon the project manager that how he leads his culturally diverse teams in order to obtain the desired outcomes for the project. Also leadership is the most essential thing for a project manager; however the leading role of the project manager is more difficult if the he has to manage culturally diverse teams for the project in regard to coding encoding of thoughts, culture, perceptions and personal attributes of the team members (Evans & Glover, 2012). Effective diversity management practices during project require ample skills and leadership qualities (Oertig & Buergi, 2006). The role of project manager as the leader has a great significance that further encourages team members and creates an effective working environment for them. These factors further help project teams in coping with the challenges in today's diversified global economy (Zhang et. al., 2015).

Diversity management is one of the most sensitive issues that a project manager has to deal with; however, it can be rewarding if managed successfully (Nguyen, 2015). Also, diversity can cover many issues such as educational background, lifestyle, ethnicity, age, disability and gender (Mohammed, 2008). If we talk in the context of project, diversity in team has been established to influence a broad range of vital team results. In global projects, diversity in teams can prompt the trade and giving out of different perceptions and

ideas, which can develop team performance and boost work inspiration and contentment regarding work.

### Project Efficiency

Spalek (2014) said that the concept of effectiveness and efficiency are generally used when evaluating different processes. While the project management can be described by different kinds of processes, the aim with this research is to explore the concepts within project management through the lens of quality management (Sundqvist et al., 2014). Hence within the field of project management (PM) the concepts of efficiency and effectiveness are commonly used, but rarely defined. Some researchers apply the concepts when describing how to improve some part of PM (Atkinson, 1999), some apply it when describing competencies for project execution (Morae & Laurindo, 2013). In this regard Patanakul and Milosevic (2008) have explained that effectiveness is usually listed as one of the reasons for measuring maturity.

According to Chiocchio et al., (2015) efficiency of the project is the ratio that helps project managers in determining the overall relation between the outputs from a process against the resources invested into performance of this project. Efficiency of the project can be measured by the volume of outputs obtained per inputs utilized (Gido & Clements, 2014). Chiocchio et al., (2015) have stated that in simple words if the output of the project is sufficient in comparison to inputs of the project then project efficiency will be equal to 100%, whereas, if the project surpasses the expectations and appears to be more profitable than before then the efficiency will be equal to 110%. Similarly, if the project is underperformed then the efficiency will be equal to 90% (Gido & Clements, 2014).

### Diversity Management in Project and Project Efficiency

In today's dynamic business world the team members for the project come from totally diverse backgrounds which further provides numerous benefits to the project along with some challenges for the project manager (Liang & Liu, 2007). Ruigrok et al., (2010) states that effective diversity management practices help project managers in managing culturally diverse team in an efficient manner, while avoiding any conflicts between team members and promoting effective communication among them (Dulaimi & Hraiz, 2011). Effective diversity management practices help project managers in aligning the performances of the team members with the ultimate objectives of the project while keeping them motivated and satisfied (Jehn, 1999). Moreover,

the increased motivation and satisfaction of project's team members will further promote positive working environment and attitudes of the team members leading to increased efficiency and productivity (Campion, 2011). In this regard, Senichev (2013) has also explained that the increased performance and productivity of the team members during project collectively contribute in increasing the overall efficiency of the project, which further helps project managers in attaining the ultimate aims and objectives of the project in an efficient manner (Gotsis & Kortezi 2014).

*Hypothesis 1. There is a positive and significant relationship between diversity management practices and project efficiency*

### **Project Success**

Bakker et al (2010) said that the project success is a core project management concept; however, there is no standardized definition of a 'project success' in the project management literature, because the success of a project is perceived differently by different success assessors. Serrador (2013) believes that the success of the project is not only meeting cost, schedule, and performance requirements; rather it requires satisfaction of more complex specifications, such as client satisfaction. In regard to the client satisfaction, Howsawi et al., (2014) have stated that the satisfaction of the client achieved along with end results, have influence on perceived success or failure of the project. As discussed above time, budget and scope of the project are crucial for the project's success; however they are necessary conditions not sufficient conditions (Shields et. al., 2010).

### **Project Efficiency and Project Success**

The efficiency of the project is directly linked with the success and failure of the project (Serrador, 2015). If the efficiency of the project is satisfactory then the project manager would be able to obtain desired outcomes from the project. Pedro (2015) has explained that the efficiency of the project is linked with meeting the cost, time and scope goals of the project, while the success of the project depends upon the wider business and enterprise goals. In this regard Moreau (2016) has also stated that there is a general agreement that although schedule and budget performance alone are considered inadequate as measures of project success, they are still important components of the overall construct. Mir and Pinnington (2013) have explained that the efficiency of the project is crucial for the success of the project because if the project is late and over budget then it will be more difficult for it to be a business success.

*Hypothesis 2. There is a positive and significant relationship between project efficiency and project success*

### **Diversity Management Practices and Project Success**

Dike (2012) said that diverse teams for the project are often acknowledged as an essential goal while developing an effective team for the project, because diverse teams for the project clearly add strengths. However, it is necessary for the project managers to manage diverse teams in an efficient manner because it presents various challenges for them, e.g. multiple viewpoints, working styles and personalities (Rad & Anantatmula, 2010). Diversity if managed properly and efficiently can significantly spark innovation, fresh thinking and creativity, because it provides a variety of new and creative ideas from different members of the team. Moreover, effective and diverse teams for the project further help project managers in increasing the overall strength of the team while compensating for the shortcomings of the team members (Pryke & Smyth, 2012). Hence, diversity in the project teams acts majorly as a source for greater productivity and success for the project. Diversity in the project team plays a crucial role in team success (Weinstien & Jaques, 2010).

Nancy (2014) has explained that it is necessary for the project manager to determine different types of diversity present in his or her team, the project manager is one step closer to being able to capitalize on these individual differences in hopes of improving team success. Furthermore, once the unique capabilities of each individual have been identified, a project manager is able to encourage team members to become aware of these diverse qualities and appropriately use them to achieve team goals, which further leads to successful completion of the project (Zein, 2016). There are quite a few benefits that project manager can obtain by successfully managing the diverse teams for the project (Tinnirello, 2001). Firstly, the diverse team is more apt to modify current processes to make them more efficient, which greatly increases overall productivity and quality. Secondly, teams become more effective through synergy and cooperation because team members are more equipped to communicate effectively, handle conflicts and are more respectful toward fellow team members (Bogeun, 2013). It also increases the creativity and innovation, which occurs due to the broader range of unique experiences and backgrounds inherent in team members.

*Hypothesis 3. There is a positive and significant relationship between effective diversity*

### *management practices project success*

#### **Mediating Role of Project Efficiency**

As discussed above, the efficiency of the project can be measured by the volume of outputs obtained per inputs utilized. However, the overall morale and satisfaction level of the team members during project majorly contribute to the overall efficiency of the project, because if any team member is dissatisfied he or she will have negative attitude towards the project and/or team members; which will further affect the performance and productivity of other team members adversely. Incidentally, Kliem (2013) has explained that it is necessary for the project manager to manage the project teams efficiently, while keeping them satisfied and motivated with their job. While on the other hand, positive attitude of a team member further influences the attitudes of other team members positively and additionally leads to increase in their motivation and satisfaction level (Richman, 2002). The increase in satisfaction and motivation of the team members further increases their productivity and performance during task, which ultimately leads to increase in the efficiency of the project. Hence, it can be seen that the overall efficiency and productivity of the members contribute to the increase in productivity and performance of the team on the whole, which further leads to increase in the efficiency of the project.

*Hypothesis 4. Project efficiency mediates the relationship between diversity management and project success*

#### **Moderating Role of Masculinity**

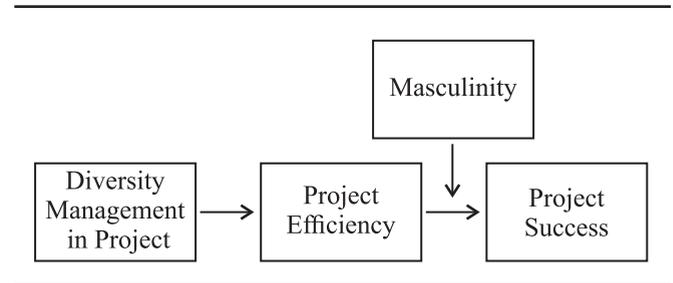
Binder (2012) has explained that masculinity and femininity reflect whether a certain society is predominantly male or female in terms of cultural values, gender roles and power relations. Every society consists of males and females, usually in approximately equal numbers. In masculine cultures, some occupations were structured based on genders, which means some jobs are given to males and others to females (Harmarij, 2013). There is also a stronger emphasis on achievements, growth and challenge in jobs (Loosemore, 2003). In these cultures, people emphasize job performance more than individual interests. Additionally, people prefer to receive money, titles or other materialistic or status-oriented rewards (Zein, 2016). On the contrary, in feminine cultures, good working conditions and job satisfaction are preferred. Meaningful rewards are leisure time, improved benefits or symbolic rewards. In this regard, Binder (2012) has explained that masculinity

stresses upon growth challenge and achievements in the job which further leads to increase in the overall efficiency of the employees, ultimately increasing the efficiency of the project.

*Hypothesis 5. Masculinity moderates the relationship between project efficiency and project success by strengthening the relationship*

#### **FRAMEWORK**

**FIGURE 1**



#### **RESEARCH METHODOLOGY**

The purpose of the study is to examine the impact of diversity management on project success mediated by project efficiency, with the moderating impact of masculinity. It's a cross-sectional study. Data were collected using questionnaire method. Sample was drawn using convenient sampling technique due to the time and budget constraints. Sample size of 100 employees from project based organizations across Rawalpindi, Islamabad region. Within these organizations, the employees were selected on the basis of personal contact and relevancy to the topic. Most of the participants were working in teams. The questionnaires were distributed among 140 employees in different project based organizations, out of which 128 were returned and only 100 usable. The response rate was 92%. Already developed questionnaires were used, on five point Likert scale from 1 = strongly Disagree to 5 = Strongly Agree.

#### **RESULTS**

##### **Correlation Analysis**

To test the research model, a survey was conducted, identified from a list of participants selected. The sample size was 100. Within these organizations, the employees were selected on the basis of personal contact and relevancy to the topic as they all were working in different sectors; adhere to project completion and success. 57% of the respondents of this research were male, while 43% were female.

Furthermore 19% of the respondents were between age group of 18-30, 16% were between 31-40, 37% were between 41-50, 24% were 51-60, while only 4% i.e. 4 respondents were above the age of 60. With regard to the qualification of the respondents 6% respondents had metric education, 2% respondents were intermediate, 22% of the respondents were holding bachelor's degree, 58% of the respondents were master degree holder and 12% were PhDs. Moreover, majority of the respondents were from private organizations and 32% were from government organization.

**TABLE 1**  
**Correlation Analysis**

	1	2	3	4
Diversity Management	1			
Project Efficiency	.032	1		
Masculinity	.209	.086	1	
Project Success	-.002	-.134	-.117	1

\*  $p=0.05$  \*\*  $p=0.01$

**TABLE 2**  
**Mediated Regression Analysis**

Predictors	Outcome Project Success		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control Variables		.001	
Step 2			
Project Efficiency	.086	.007	.007
Step 3			
Diversity Management	.209	.044**	.044**

\*  $p=0.05$  \*\*  $p=0.01$

**TABLE 3**  
**Moderated Regression Analysis**

Predictors	Outcome Project Success		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control Variables		.157	.157
Step 2			
Project Efficiency	-.059	.196	.039
Masculinity	.191**		
Step 3			
PE*M	0.366***	.271***	0.75***

\*  $p=0.05$ , \*\*  $p=0.01$ , \*\*\*  $p=0.001$

Reliability should be (0.7 or above 0.7) and Masculinity shows higher reliability (.75) which means it has a strong impact on both IV and DV respectively. Diversity management shows strong or moderate reliability (.68). Project efficiency shows less reliability than the given reliability value (.60), but within acceptable range. Project success also shows less reliability than expected value which mean that DV of research is not strong but it takes effect on it as the IV and moderator of research are strong enough.

### Regression Analysis

The first hypothesis of this research was that there is a positive and significant relationship between diversity management practices and project efficiency and the results of the mediated regression analysis (table 2) show that the diversity has positive relationship with project efficiency having  $\beta$  value of .032, but the significance value of P is greater than 0.05, thus leading to the rejection of hypothesis one. R<sup>2</sup> and  $\Delta R^2$  were also observed at .947\*\*\*. The second hypothesis of this research was that the project success and project efficiency are positively linked with each other and the results of the regression analysis show that the Project efficiency has a positive relationship with Project Success having  $\beta$  value of .086 but the significance level does not fulfill the requirements that p value should be  $\leq 0.05$  which is acceptable range. R<sup>2</sup> and  $\Delta R^2$  were also observed at .007. Therefore, hypothesis two had been rejected as well.

The third hypothesis of this research was that there is a positive and significant relationship between effective diversity management practices and project success. Results of the regression analysis show that Effective diversity management positively help project managers in leading project towards success having  $\beta$  value of 0.366\*\*\* where value of p is .000 which fulfills the requirements that P values should be less than 0.05. R<sup>2</sup> and  $\Delta R^2$  were also observed at .271\*\*\* and .075\*\*\* respectively. Thus, the hypothesis is accepted. Fourth hypothesis of this research was that the project Efficiency plays mediating role between Diversity Management and Project Success and the results of the regression analysis show that the project efficiency does not mediate the relationship between diversity management and project success having  $\beta$  value of .086 but the significance value does not fulfill the requirements that p value should be  $\leq 0.05$ , which is acceptable range. R<sup>2</sup> and  $\Delta R^2$  were also observed at .007. Thus the hypothesis is not supported. Fifth hypothesis stated that the masculinity plays a moderating role between Project Efficiency and Project Success, i.e. it strengthens the relationship. Moderation

analysis results (table 3) indicate that the impact of interaction term, i.e. Project efficiency and masculinity (PE\*M) is significant, with the change in  $R^2$  at .075, therefore, this leads to the acceptance of the moderation hypothesis.

## DISCUSSION

The main objective of this paper was to evaluate the role of effective diversity management practices towards the success of the project. After obtaining and analyzing the data through questionnaires from the respondents, it is evident that effective diversity management practices do contribute to the overall success of the project. The hypothesis one of the research was that there is a positive and significant relationship between diversity management practices and project efficiency and the results of regression analysis show that there is no direct relation between effective diversity management practices and the success of the project. Also the significance value does not fulfill the requirements and the hypothesis is rejected. Hence, it can be stated that in business organizations there is diversity in the workforce in Pakistan, which present numerous challenges to the project managers while handling the diverse team, however, it does not significantly help project managers in completing the projects efficiently. In this regard, the results of the study show that effective management of diverse project teams do not ensure overall project's efficiency; however, it does have a positive influence on the success of the project.

The second hypothesis of this research was that there is positive link between the efficiency and the success of the project, which has been rejected in this study. In this regard, the regression analysis has shown that efficiency and success of the project are not linked with each other, with significance value  $P < .05$ , thus the hypothesis is rejected. The reviewed literature shows that if the overall efficiency of the project team is higher during the project then it will surely help project manager in completing the project in effective and efficient manner. While on the other hand, if the efficiency of the project team is not satisfactory during project, then this will have negative impacts on the success of the project. While the results of this research show that in Pakistan, the overall efficiency of the project is not linked with its success, hence research rejects the hypothesis. The third hypothesis of this research was whether effective diversity management practices help project managers in leading project towards success. The results of the study show that effective diversity management practices do help project managers in leading the project towards success, because it helps them in maintaining or enhancing the overall satisfaction and morale of the

team members during project, which further increases their efficiency and productivity leading project towards success. Hence the hypothesis has been accepted.

Fourth hypothesis of this research was to determine if project efficiency mediates relationship between Diversity Management and Project Success. The results of the mediated regression analysis show that the overall efficiency of the project does not mediate the relation between the diversity management practices and project success because diversity management practices enhance the overall efficiency of the members in project team, which further increases the overall efficiency of the project teams leading projects towards success. Also the reviewed literature of the research shows that masculinity stresses upon growth challenge and achievements in the job which further leads to increase in the overall efficiency of the employees, ultimately increasing the efficiency of the project. The results of the moderated regression analysis indicate that masculinity does moderate the relation between project efficiency and project success, i.e. it strengthens the relationship between the two. In this regard the reviewed literature has showed that in such business environments there is a stronger emphasis on the growth, achievements and challenges in job and employee focus on job performance instead of individual interests.

## CONCLUSION

The study attempted to explore the link between diversity management and the project success, with the mediating role of project efficiency and masculinity as the moderator. The data were collected from the project based organizations in Rawalpindi Islamabad region. The results of the study indicate that diversity management does have a significant and positive relationship with the project success and also has a positive relationship with the project success. Although, project efficiency does lead to the overall success of the project, it hardly mediates the relationship between the diversity management and the project success. As for masculinity, the results posited that it does moderate the relationship between project efficiency and success, i.e. incorporating masculinity as the moderator among the two further strengthens the relationship.

### Implications for Managers

The study has implications for the project managers to ensure project success. It can be stated that it is necessary for the project managers to determine the needs and wants of teams working under their supervision in order to manager and avails benefits from diverse teams of the organization. Also the project managers

must employ effective diversity management practices while keeping the overall satisfaction and morale of the employees high because this will help them in increasing the overall efficiency of the project team which further leads a project towards success. Hence, in order to make project successful and to increase project's efficiency, the managers need to give value to the contribution made by teams in the wellbeing of the organization.

### Limitations

Every research has certain limitation, so the present study isn't any different. One of the major limitations of this research was that the data was obtained from questionnaire only making it dependent upon single source. This might have led to biased responses from the respondents. Because the major limitation of questionnaire method is that sometime the respondents do not take interest in filling the questionnaire and they just fill out the questionnaire quickly without paying proper attention to the questions. This further leads to lack of validity and reliability. Likewise, the data was collected only from Twin cities area, causing the generalizability issues. Another major limitation to this study was small sample size due to the lack of time and this was the major reason that the researcher had selected the convenience sampling method as well.

### Recommendations for Future Research

Although, the objectives of this research have been attained, there are still factors that could be incorporated to make the study more comprehensive. Incorporating more relevant variables as antecedents of projects success, can further help clarify the relationship. Similarly, this study focuses on studying one of the many antecedents of the project success; it can be taken a step ahead, by adding and evaluating the outcomes of the project success on overall employee and the organizational performance.

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# **IMPACT OF ETHICAL LEADERSHIP ON FOLLOWERS' ORGANIZATIONAL DEVIANCE, MEDIATING ROLE OF PSYCHOSOCIAL SAFETY CLIMATE, MODERATING ROLE OF UNION COMMITMENT A STUDY IN THE CONTEXT OF PAKISTAN**

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## **ABSTRACT**

**The purpose of the study was to investigate the relationship between Ethical Leadership and followers' Organizational Deviance, followed by the mediating role of Psychosocial Safety climate and moderating role of Union Commitment among the young doctors in Pakistan. Data were collected from young/junior doctors (practitioners) working in public/ private hospitals in Islamabad, Rawalpindi, and Bahawalpur. Hierarchical Regression tests were run and the results indicated that Ethical Leadership has a significant and negative relationship with Organizational Deviance. Further, the results indicated that Union Commitment moderates the relationship between Ethical Leadership and Organizational Deviance, such that greater the commitment of the members with the union would result in weakening the relationship between ethical leadership and organizational deviance. The findings also suggest that psychosocial safety climate does not mediate between ethical leadership and organizational deviance.**

## **INTRODUCTION**

According to Deal and Peterson (1999), the role of leadership is to create, encourage and refine symbols and activities that are meaningful for the organization. There are various leadership styles, like transactional, transformational, autocratic, democratic, laissez-faire, bureaucratic, despotic, servant, authentic, spiritual and ethical leadership.

For this study, the ethical dimension of leadership is being focused because of the outcomes it is said to influence (Brown & Treviño, 2006). Workplace deviance is traditionally identified in the literature as one of the possible reactions of followers to low ethical leadership (Brown & Treviño, 2006; Mayer et al., 2009). Thus far, researchers have assumed that ethical leadership would translate into less deviance, and that low ethical leadership would evoke more deviance for all followers alike (Mayer et al., 2009; De Hoogh and Den Hartog, 2008). Although previous findings are promising, yet an ambiguity remains as, in a study by Detert et al. (2007), the researchers could not find a significant relationship between ethical leadership and counterproductive/deviant workplace behavior. For future investigations, the researchers suggested that studies involving organizational contexts should

also consider the nature or type of work and type of employees to analyze whether it affects the type of leader's influence on them; also, the outcome variables should also be taken into consideration to analyze whether it, or together with type of work and employees, impact the managerial influence on employees. Therefore, in this study, Pakistani context is taken into account, i.e., effects of ethical leadership on deviant behavior among "doctors" in Pakistan, as evident by a series of protests organized by Young Doctors Association, would be examined, which has never been investigated in this context before. These doctors in Pakistan are constantly showing resistance through their deviant behavior to protest against the perceived injustice practiced in the overall medical structure. Latest protest was observed in Islamabad on 8th September, 2015, where doctors and paramedical staff raised their voice against freezing of Health Risk Allowance. Pertaining to the current scenario, it is important to investigate what type of leader would negatively affect the deviant behavior of doctors, an ethical dilemma impacting the integrity of the profession on the whole.

Because leaders represent their organizations; therefore, when followers perceive their leaders as unethical, they retaliate against the organizations as it

becomes a logical target for them (Bennett & Robinson, 2000; Tepper et al., 2009; Warren, 2003). Therefore, the focus in this research is organization-directed deviance.

Leaders and followers together make up the work environment. The quality of the leadership and its followers' exchange relationship impact the quality of the work atmosphere or climate leading to favorable or unfavorable outcomes. In recent years, psychosocial safety climate, a type of organizational climate, has gained immense importance due to the high quality output it influences in organizations by their employees. According to Kidwell and Valentine (2009), if employees perceive their organizational climate as supportive, both socially and emotionally, then employees are more likely to reduce their level of deviant behaviors because of the positive attitude they will develop towards the organization. Such a type of organizational climate is known as Psychosocial Safety Climate as defined by Dollard (2007) as "policies, practices, and procedures for the protection of worker psychological health and safety". Psychological health and safety relates to psychological well-being, away from psychological risk and harm.

There are many studies which have linked psychosocial safety climate with ethical leadership and individual stressors like fatigue (e.g. Garrick, Mak, Cathcart, Winwood, Bakker & Lushington, 2014) and interpersonal deviances like workplace bullying and harassment (e.g. Law, Dollard, Tuckey, & Dormann, 2011). Law et al., (2011) found that Psychosocial Safety Climate was inversely related with workplace bullying and harassment, leading to reduction in psychological health issues. However, we have not been able to find many research works which have explored the relationship between PSC and Organizational Deviance; thus, we can say that the relationship between PSC and Workplace Deviance has been partially explored. In addition, there are not many studies which have investigated the intermediary role of PSC between variables. Thus, this study can contribute towards fulfilling this gap, to some extent, in the literature. Linking ethical leadership with PSC as its antecedent and reduced organizational deviance as its outcome gives it an intermediary role in this study.

As explained earlier, the relationship between ethical leadership and organizational deviance has not been found certain in a few studies; to increase the understanding of this relationship, it may be further explored by taking into consideration some prospective moderating variables (Avey, Palanski, & Walumwa, 2010). An important topic for investigation involves the possible impact of union commitment on the negative relationship between ethical leadership

and organizational deviance. As said previously, more ethical the leaders are, less deviance would be observed in the employees of that organization, but considering the present circumstances for doctors in Pakistan, where cooperative conditions between Young Doctors Association and the Government seems to be negligible, it is important to investigate whether union commitment would diminish that impact of ethical leadership on organizational deviance, i.e., employees will still show deviant behavior even though their leaders exhibit and promote ethical behaviors in the organization.

By and large the objective of this study is to develop an integrated model and test it to analyze the relationship between ethical leadership, organizational deviance, psycho-social safety climate, and union commitment. In addition, the moderating role of commitment with the union will also be studied. The graphical representation of the proposed relationship between independent, mediating, moderating and dependent variables is illustrated in the research model section of this paper. This paper ends with discussion and recommendations for future research.

## LITERATURE REVIEW

### Ethical leadership

Researchers had long observed that integrity/honesty, a personal/spiritual trait, would be significantly linked with followers' perceptions of leadership effectiveness, and empirical studies have validated this relationship (e.g., Reave, 2005). Other examples include the work of Den Hartog et al. (1999) and Posner and Schmidt (1992) who found that perception of a leader's integrity, truthfulness, and trustworthiness has a significant impact on its effectiveness. Similarly, cognitive trust, developed by being fair, professional and reliable (McAllister, 1995) has also been linked with leadership effectiveness (Dirks & Ferrin, 2002). Based upon these work, Trevino et al. (2000, 2003) conducted an exploratory research specifically designed to answer the question and better understanding of "what the term ethical leadership means to proximate observers of executives"? For this purpose they conducted structured interviews in different industries and collected the response from twenty senior executives and twenty ethics/compliance officers. The respondents were asked to bring in mind the image of the ethical leader with whom they were familiar, and answer questions related to their leader's characteristics, motives and behaviors. The interviews revealed that a number of personal traits were associated with ethical leadership, like they were thought to be honest, altruist, fair, dependable, trustworthy, decision makers based on principles, and who care about the people and the

society as a whole. They exhibit ethical behavior in their personal as well as professional settings. The researchers regarded these characteristics as the moral aspect of ethical leadership, and thus labelled a dimension of ethical leadership as moral manager, which represents a leader's proactive efforts to enhance the ethical behavior of the followers.

Summing up, Brown et al. (2005) defined ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making". Thus, we can say that ethical leaders contour and discipline the ethical behavior of their employees, ultimately resulting in a number of positive outcomes such as followers' citizenship behavior at the organization (e.g., Kacmar, Bachrach, Harris, & Zivnuska, 2011; Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009; Mayer et al., 2009), proactive behavior such as voice behavior (Kalshoven, Den Hartog, & De Hoogh, 2012; Walumbwa & Schaubroeck, 2009), consequently helping the organization's ethical climate (Mayer, Kuenzi, & Greenbaum, 2010; Schaubroeck et al., 2012; Schminke, Ambrose, & Neubaum, 2005), and followers' performances (e.g., Piccolo, Greenbaum, Den Hartog, & Folger, 2010).

Ethical leadership can be distinguished from other follower-focused leadership styles that consist of both moral and amoral aspects, such as transformational leadership (Bass & Avolio, 1994; Bass, 1990; Burns, 1978; Van Knippenberg & Sitkin, 2013) or servant leadership (Liden, Wayne, Zhao, & Henderson, 2008). The central aspect for this distinction is that ethical leadership is driven by moral motives that are independent of the mental frame of the perceiver. The idea that ethical leadership is based on the leader's moral motivation is supported by research, showing that ethical leaders possess moral personality traits such as a moral identity (Mayer et al., 2012) and a high social responsibility (De Hoogh & Den Hartog, 2008). Moreover, Eisenbeiss (2012) has linked ethical leadership with four essential normative reference points, where the first one is known as humane orientation, which involves treating others with respect and dignity. The second is known as justice orientation, which involves making fair and principled based decisions. Third is known as responsibility and sustainability orientation, which involves a leader's concern in their long-term views for the welfare of the people and the society as a whole. And fourth is known as moderation orientation, which refers to abstinence and humility of the ethical leader. Together, these orientations represent universally shared moral norms

underlying ethical leadership.

### **Ethical leadership and Organizational Deviance**

Ethical leaders are the type of leader who can influence their employees/followers in different ways. They are responsible for observing and implementing the ethical standards in their organization. For establishing such standards, they become role models for the ethical behavior, or they assure that ethical codes are being followed through reinforcement (Mayer et al., 2012; Brown et al., 2005; Weaver, Trevino, & Agle, 2005; Trevino, Hartman, & Brown, 2000; Walumbwa et al., 2011). Depending on the quality of leader-follower relationship, the ethical behavior of the leaders is reciprocated accordingly (Brown & Treviño, 2006; Walumbwa et al., 2011). Ethical leaders also increase follower organizational identification (Van Knippenberg, Van Knippenberg, De Cremer, & Hogg, 2004); an element which enhances a follower's motivation to achieve collective goals or exhibit such a behavior that it benefits the organization (Walumbwa et al., 2011). Altogether, high ethical leadership seems to motivate followers to reciprocate with moral behavior, yet low ethical leadership motivates followers to display negative behavior (Kacmar et al., 2011; Weaver et al., 2005) either through modelling, breaches in the exchange relationship, or reduced identification.

In literature, this display of negative behaviors have been labelled with different names, e.g., some researchers call it as an antisocial organizational behavior, while others call it as workplace deviance, organizational misbehavior, dishonesty, employee withdrawal, counterproductive behavior or dysfunctional behavior, to name a few (Everton et al., 2007). Robinson and Bennett (1995) conceptualized workplace deviance based on Kaplan's (1975) view on particular norms of the organization. Robinson and Bennett (1995) defined workplace deviance as any intentional behavior that goes against the norms of the organization, posing threat to the well-being of the organization and the members of it. Thus, workplace deviance is not defined in terms of a standard of moral behaviors as shaped by policies, procedures and rules, rather it is the deviation from such standards that when an individual is considered to be in the loop of displaying deviant workplace behaviors. In addition, this framework also stresses that to be considered deviant, the behavior should be of such a nature that it poses threat or harm to the well-being of the organization or its members; thus, social blunders, or poor manners can be excluded from this framework. Being confronted with low ethical leadership is likely to be a frustrating experience for some followers, and can be vented out in several ways (Gils, Quaquebeke,

Knippenberg, Dijkec & Cremer, 2014). Followers could react to the person displaying the unethical behavior directly. However, reactions of the followers to their leader's unethical behavior can be a restricted one due to less authority and power followers have as compared to their leaders. Therefore, deviant behavior is often directed at the organization, in the form of falsifying receipts or putting lower effort into the job, or at the organization's members, in the form of interpersonal aggression toward others in the organization (Bennett & Robinson, 2000; Robinson & Bennett, 1995). Indirectly retaliating toward the organization through deviant behavior often seems a safer choice (Mayer et al., 2009; Detert, Treviño, Burris, & Andiappan, 2007).

Thus far, researchers have assumed that ethical leadership, where followers are treated with equality and respect, would translate into less organizational deviance and vice-versa.

Hence the following hypothesis

*Hypothesis 1. Ethical leadership has a negative relationship with Organizational Deviance*

## **Mediating role of Psychosocial Safety Climate**

### **Ethical leadership and Psychosocial Safety Climate**

Psychosocial safety climate (PSC) is defined as "shared perceptions of organizational policies, practices and procedures for the protection of worker psychological health and safety, that stem largely from management practices" (Law, Dollard, Tuckey & Dormann, 2011). According to Dollard (2011), the concept of work stress, organizational climate, and psychosocial risk together made up the concept known as psychosocial safety climate. It is a specific dimension of organizational climate which relates to an employee's freedom from psychological risk and harm at its workplace (Dollard & Bakker, 2010). Thus, it reflects the concern that management should have to safeguard psychological health of the workers, rather than giving priority to production demands which may pose a threat to psychological well-being of the employees at some point in time (Dollard & Bakker, 2010). According to James et al. (2008), PSC measure stems mostly from the idea that people credit meaning to their work conditions, which includes their salary, administrative frameworks, co-worker treatment, and an environment of justice. As being what is indicated, routes in which PSC can get to be unmistakable to people include correspondence frameworks at all levels of the organization (e.g., for reporting poor mental well-being at work) and effectively including all layers of the association in work stress aversion (Dollard & Bakker, 2010).

PSC relates to a work environment for employees' psychological health and safety, and includes four interconnected, yet very significant principles (Dollard, 2011; Hall et al., 2010). The first principle relates to the ability of senior management commitment and support for stress aversion. The second principle relates to the importance that management gives to psychological health and safety, as opposed to productivity demands. The third principle involves upward and downward communication to aware every employee regarding the importance of psychological health and safety. The fourth principle relates to the extent to which managers as well as employees are involved and contribute towards psychological health and safety (Dollard, 2011; Hall et al., 2010). Employees' perception of these principles, at a departmental level or an organizational level, is aggregated to quantify PSC.

According to Edmondson (1999), psychological well-being alludes to shared convictions among work unit individuals that it is alright for them to participate in interpersonal risk taking. As indicated by Edmondson, psychological security goes past seeing and encountering greater levels of interpersonal trust; it additionally portrays a work atmosphere based on mutual respect/regard, one in which individuals are open to communicating their disparities. Leaders are crucial for uprooting the hurdles that frequently debilitate followers from communicating their worries, concerns, and different thoughts. In climates high in psychological safety, leaders, additionally, effectively convey the significance of such a safety behavior, and assure that it won't have negative consequences for the individual or the work unit. In this regard, ethical leadership may be especially vital, but then this capacity is overlooked in the writing. According to Brwon et al. (2005), ethical leaders with higher moral standards value fair and honest associations with their adherents/followers. They behave according to their fundamental beliefs and values, as opposed to feeling pressurized and reacting to external demands. At the point when leaders associate with followers with openness and honesty, mutual respect and interpersonal trust is advanced between both the leaders and the followers; and not just between them, but among the followers as well.

Therefore, when followers believe that their leaders have adequate ability, generosity, and integrity, which are key establishments of a worker's trust on its leader (Mayer, Davis, & Schoorman, 1995), they will be more agreeable about taking part in interpersonal risk taking on the grounds that they perceive their leaders would not unjustifiably rebuff them when risk taking would lead to an unfavorable result (Dasborough & Ashkanasy, 2002; Weieter, 1997). This suggests a positive relationship between ethical leadership and followers' psychological

safety.

Thus, we derive our hypothesis:

*Hypothesis 2a. Ethical leadership has a positive relationship with Psychosocial Safety Climate*

### **Psychosocial Safety Climate and Organizational Deviance**

As the present circumstances of doctors in Pakistan, where protests are frequently observed, it is critical for organizations to better comprehend the elements that impact employees to show such deviant behavior. According to Riggle (2007), this growing interest in understanding employees and their behavior has prompted researchers to investigate employees' perceptions of organizational climate as well, as it has significant outcomes for both the members and the organization. The climate at the workplace influence workers' conduct, states of mind, motivation and capabilities, which is anticipated to impact organizational profitability eventually (Adeniji, 2011). This is to say that organizational climate is viewed as essential element in the life of organization because of its unmistakable impacts, and its relation with the administrative practices. It influences an individual's job satisfaction and commitment, leading to better performance, thus influencing the accomplishments of the association and its capacity to proceed (Al-Saudi, 2012). Researchers now understand the importance of organizational climate to impact employees' attitudes and behaviors; therefore, they are expanding their considerations in the domain of organizational behavior (Holloway, 2012).

Analysts propose that organizational climate is connected with positive behaviors like organizational citizenship behavior, and negative behaviors like dysfunctional or counterproductive or deviant behavior. (Scheuer, 2010; Farooqui, 2012; Al-Saudi, 2012; Fagbohunbe et al., 2012; Wolf et al., 2012; Bellou & Andronikidis, 2009). As individuals have a tendency to understand and blend in with the climate of the organization, it has a critical effect on their conduct (Vardi, 2001). Consequently, if employees feel support from the organization in the form of employee oriented policies, making them feel psychologically safe, they would be more inclined towards creative and supportive behavior when confronted with troubling issues. On the other hand, if employees see their work environment as unjust, unfair and non-supportive, they would be more inclined to get upset and baffled, and would display negative conduct like deviant behaviors (Wolf et al., 2012). An empirical study illustrated that employees' perception of injustice and unfair treatment

at the workplace leads to negative emotions such as resentment, anger and outrage, and thus to behavioral reactions, like organizational retaliatory behavior or deviant workplace behavior (Skarlicki & Folger, 1997). Likewise, Cropanzano and Baron (1991) connected unfair treatment to emotions and ultimately conflict at the workplace. Cropanzano, Howes, Grandey, and Toth (1997) also related deviant/counterproductive work behaviors to elevated job tensions, fatigue and burnout. In other words, psychological health problems which are attributed to organizational climate with low psychosocial safety, leads to deviant workplace behaviors. All the explanation above suggests a negative relationship exists between psychosocial safety climate and organizational deviance. Thus, the following hypothesis:

*Hypothesis 2b. Psycho-social Safety Climate has a negative relationship with Organizational Deviance.*

A key element of social exchange theory is that the quality of the exchange relationship between the two entities is the most proximal reason for their behavior. This is to say that employees choose which behavior to exhibit on the premise of the sort of connection they have with the other individual.

It is argued that ethical leadership promotes positive behavior among employees like interpersonal helping or citizenship behavior (Brown et al., 2005). When employees are dealt with reasonably by their leaders, they are prone to consider their association with their leader in terms of social exchange, instead of economic exchange. One approach to respond to such treatment is to indulge in citizenship behavior. On the other hand, employees who are treated unfairly by their leaders would reciprocate by exhibiting deviant behaviors. In addition, it makes sense that employees high in psychological safety, because of the moral conduct of their leaders, would perceive lesser threat to their own particular welfare while communicating their ideas, worries and concerns. An empirical evidence for this relationship was given by Tangirala and Ramanujam (2008), when they found out that stronger the climate of the procedural justice, lesser would be the silencing of opposing/disagreeing opinions among nurses. Individuals treated with fairness, respect and mutual understanding perceive their climate to be high in psychosocial safety, and in turn are less likely to indulge in counterproductive deviant behavior. Hence, the explanation above about the effects of ethical leadership on psychosocial safety climate and employee organizational deviant behavior, and the linkage between psychosocial safety climate and employee organizational deviant behavior suggest the

following hypothesis:

*Hypothesis 2c. The negative relationship between ethical leadership and organizational deviance is partially mediated by employees' perceptions of psychosocial safety climate.*

### **Moderating role of Union Commitment**

In Pakistan, given the circumstances of lack of service structure, security and low pay, an informal body namely the Young Doctors' Association (YDA) stepped forward with a motive to safeguard the rights of the doctors (of the Punjab province of Pakistan), by negotiating with the government for resolution of their problems; yet, the government's failure to adequately deal with the situation has resulted in frequent protests by doctors and deviant behaviors at the workplace. The previous literature also highlights that job dissatisfaction, rather than the union's ability to promote workplace justice, is the main cause to union organizing and militant participation. (e.g. Kochan 1979; Barling et al. 1992; Kuruvilla et al. 1990). Kelly (1998) attributes injustice to be the root cause of collective action, regardless that it is organized by a union or other body, or is planned or decided in the spur-of-the-moment situation. Under adversarial conditions where union and organization interests are in sharp conflict, commitment to union would diminish organizational commitment's relationship with positive behavioral outcomes (Larson & Fukami, 1984).

Union commitment is caused by both organizational and individual factors and bearing many organizational implications (Bamberger, Kluger, & Suchard, 1999). Among them, Iverson & Kuruvilla, (1995) observed positive and negative affectivity of employees, job related variables such as job dissatisfaction and organizational variables like leadership behavior are mainly causing union commitment. Felt grievances and dissatisfaction with management are positively associated with militant union participation of employees which is an outcome of union commitment (Parks et al., 1995). Thus, we can say that positive attitude towards the union develops because of dissatisfaction with employer organization; therefore it reasons the supporting role for militant participation of members. This is further evident in the "dual loyalty research" of the 1950s which tested the hypothesis that positive attitudes towards the union would lead to negative attitudes towards the employer (Dean, 1954; Kerr, 1954; Purcell, 1954; Stagner, 1954). Militant participation is defined as any activity with respect to union individuals to withhold work movement, for example, a strike or work slowdown. A strike is a transitory stoppage of work by union

representatives to express an intense grievance, and work slowdown is an intentionally planned activity to reduce productivity. Both of these forms to show resistance also lie under the typology of deviant workplace behavior. Intentional work slowdown comes under the category of Production Deviance, and aim for temporary stoppage of work can be achieved by outright protests including sabotaging equipments which comes under the category of Property Deviance. Militant participation in which the concept of organizational deviance is embedded signifies the relationship between union commitment and organizational deviance; militant participation being an eventual outcome of union commitment.

Conley's (1990) study of teacher propensity to take militant action with regard to workplace control concluded that militancy was best understood in terms of teachers' perceived integration into the school organization. Teachers who perceived little feedback, influence, and satisfaction with supervisor, along with accompanying high role conflict, were more likely to increase their commitment to the union and show support to militant participation.

Correlations have been found between militancy and both satisfaction with union leaders (Martin, 1986) and commitment, though the latter may be moderated by age (Black, 1983).

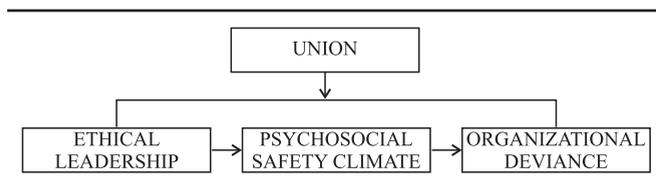
It would be misrepresenting if individuals' union commitment is consigned exclusively to a financial trade (economic exchange). Therefore, the concept of social exchange is embedded to explain the relationship between a member and the union, as, according to Sinclair and Tetrick (1995), it refers to the socioemotional support provided by the union to its members.

Referring back to the situation of young doctors in Pakistan, using the framework of Social Exchange theory we argue that if union is providing the perceived benefits to the employees such that their problems and concerns are being communicated in the form of militant participation / partial organizational deviance, protecting the rights or ensuring a just system in the workplace, then ethical leadership will not help as much to reduce organizational deviance in the workplace. In other words, union commitment will weaken the relationship between ethical leadership and organizational deviance in such a manner that higher level of union commitment will weaken this relationship.

Thus we derive the following hypothesis,

*Hypothesis 3. Union commitment moderates the relationship between ethical leadership and organizational deviance, such that employees with strong union commitment would still exhibit organizational deviant behaviors even though leadership is ethical.*

## THEORETICAL FRAMEWORK



## RESEARCH METHODOLOGY

### Sampling

A target of 300 respondents to fill the questionnaires was set, but data could be obtained from 178 respondents. The target population of this research was young/junior doctors (practitioners) working in public and private hospitals in Islamabad, Rawalpindi, and Bahawalpur. In this study, based on limited resources, two types of non-probability sampling techniques have been used to gather the required data from the sample. One is convenient sampling technique and second is snow ball sampling technique. The sample consisted of 178 doctors. About 67 percent males and 32 percent females filled up the questionnaire. They fell mostly in the age bracket of 36 – 40 years. Almost 59 percent of the respondents were post graduates and majority of the respondents had work experience between 1 and 3 years.

## INSTRUMENTATION

### Ethical Leadership

Ethical leadership was measured using the ten-item ELS scale by Brown, Treviño, and Harrison (2005). The instrument exhibit high reliability and stable unidimensionality. The authors state that this short measure of Ethical Leadership can be readily utilized into survey research. Examples of the items are “My leader conducts his/her personal life in an ethical manner.” And “My leader defines success not just by results but also the way that they are obtained.” A five point ranging scale of strongly disagree (1) to strongly agree (5) was used.

### Psychosocial Safety Climate

It is proposed that Psychosocial Safety Climate has four domains, namely, Management Commitment, Priority, Communication and Participation and Involvement (Hall, Dollard, & Coward, 2010). After systematic testing of the scale, the researchers stated that this instrument can be used upon a multiple range of occupations. For this study, the instrument has been taken as a single construct. Examples of items include: “In practice, the prevention of stress involves all levels of

the organization”; “In my organization my contributions to resolving occupational health and safety concerns regarding psychological well-being are listened to”. Responses in this study were taken on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

### Union Commitment

Union commitment was measured using a 13 items questionnaire established by Kelloway, Catano, and Southwell (1992). These items were divided into three dimensions namely, Loyalty, Willingness to work for the Union and Responsibility to the Union. Examples of the items are: “it is every member’s responsibility to see that the other member live up to the collective agreement” and “It is every member’s duty to support or help another worker use the grievance procedure”. The items were measured on a 5 point Likert scale ranging from 1 as Strongly Disagree to 5 as Strongly Agree.

### Organizational Deviance

Organizational deviance is one of the dimensions of workplace deviance. The other dimension is interpersonal deviance. For the current study only items related to organizational deviance have been used, as in an unjust environment, employer organization becomes a logical target for retaliation by employees. A 12 items instrument to measure organizational deviance was developed by Bennett and Robinson (2000), which measures the frequency in which the respondents engage in behaviors that are harmful to the organization; hence, a 5 point Likert scale was used in which 1 represented Never and 5 represented Always. Bennet and Robinson (2000) found internal reliability of the scale to be 0.81. Sample items from the scale include: “take property from work without permission”, “intentionally work slower than one could have worked”.

## RESULTS

In order to find support for the direct relationships, mediation and moderation of the proposed model, correlation tests were run on SPSS. Further, Hierarchical Regression tests were run in order to either validate or reject the proposed hypothesis.

The table (1) shows mean, standard deviation, and correlation amongst the variables under study. According to the table, Ethical leadership is negatively and significantly correlated with Organizational Deviance as  $r = -.188$  and  $p < 0.05$ . Ethical Leadership is positively and significantly correlated with Psychosocial Safety Climate as  $r = .178$  and  $p < 0.05$ .

**TABLE 1**  
**Mean, Standard Deviation, Correlation**

	Variables	Mean	S.D	1	2	3	4
1	EL	4.20	0.80	1			
2	PSC	3.09	0.96	.178*	1		
3	UC	3.62	0.76	.265***	.182*	1	
4	OD	2.37	1.19	-.188*	-.064	.306***	1

*N* = 178, \**P* < 0.05, \*\**P* < 0.01, \*\*\**P* < 0.001 (EL = Ethical Leadership, PSC = Psychosocial Safety Climate, UC = Union Commitment, OD = Organizational Deviance)

**TABLE 2**  
**Hierarchical Regression Analysis for Determinants of Ethical Leadership**

Predictors	Psychosocial Safety Climate			Organizational Deviance		
	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step I:						
Control Variables		.054			.293	
Step II:						
Ethical Leadership	.347***	.121	.067***	-.414**		
Psychosocial Safety Climate				-.108		
Union Commitment				.617**	.411	.118**

*n* = 178, control variables are gender, age, experience, qualification and hospital type.

+ *p* < .10, \**p* < .05, \*\**p* < .01, \*\*\**p* < .001

Psychosocial Safety Climate is negatively but insignificantly correlated with Organizational Deviance as  $r = -.064$  and  $p > 0.05$ . Union commitment is positively and significantly correlated with Organizational Deviance as  $r = .306$  and  $p < 0.001$ .

The above table (Table 2) shows hierarchical regression analysis for determinants of Ethical Leadership.

According to the table (Table 2) there is a negative and significant relationship between the independent variable, which is Ethical Leadership, and the dependent variable, which is Organizational Deviance ( $\beta = -.414$ ,  $p < 0.01$ ). Ethical Leadership also has a significant but positive relationship with the mediator, i.e., Psychosocial Safety Climate ( $\beta = .347$ ,  $p < 0.001$ ). However, Psychosocial Safety Climate does not have a significant relationship with Organizational Deviance ( $\beta = -.108$ ,  $p > 0.05$ ). The moderator, Union Commitment, has a positive and significant relationship with Organizational Deviance ( $\beta = .617$ ,  $p < 0.01$ ).

According to Baron and Kenny (1986), we need to establish three conditions in order to determine whether mediation occurs or not. First, the independent variable (Ethical Leadership) should predict the dependent variable (Organizational Deviance). Second, the independent variable should predict the mediator

(Psychosocial Safety Climate). Third, the mediator should predict the dependent variable. Here, the first two conditions are being met, but our mediator, i.e. Psychosocial Safety Climate is not predicting the dependent variable, i.e. Organizational Deviance. Hence, Psychosocial Safety Climate is partially mediating the relationship between Ethical Leadership and Organizational Deviance.

Table 3 shows the regressed analysis of moderation. As R<sup>2</sup> represents variance in the model, and  $\Delta R^2$  represents change in variance due to introduction of a new variable; therefore, increase in R<sup>2</sup> at each stage is reflecting that the introduced variable has a significant impact.

According to the results, the moderator, i.e., Union Commitment having  $\beta$  value as .135 with significance value below .01 indicates a positive and a significant impact on the relationship between Ethical Leadership and Organizational Deviance; thus saying that greater the positive impact of moderator, it will further weaken the negative relationship between independent and dependent variable. In other words, higher the union members' commitment to their union, lesser would be the impact of their Leader's Ethical behavior on Organizational Deviance. Thus, our last hypothesis gets accepted.

**TABLE 3**  
**Results of Hierarchical Moderated Regression**  
**Analysis**

Predictors	Organizational Deviance		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Moderator Analysis			
Ethical Leadership			
Step I:			
Control Variables		.293	
Step II:			
Ethical Leadership	-.280*		
Union Commitment	.597**	.376	.136**
Step III:			
Ethical Leadership x Union Commitment	.135**	.393	.035**

*n* = 178, control variables are gender, age, experience, qualification and hospital type.

+  $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

## DISCUSSION AND CONCLUSION

The results validated the hypothesis 1. They indicated a negative and significant relationship between Ethical Leadership and Organizational Deviance. This result is in line with many previous studies. For example, Mayer, Kuenzi, Greenbaum, Bardes, and Salvador (2008) conducted their research on employees from 160 different organizations in Southeast U.S. and found out that while ethical behavior is important at all levels of the organization, yet the ethical behavior of the direct supervisor is most important in influencing more positive behavior like organizational citizenship behavior, and less deviant behavior among employees. Their hypothesized relationship was significant at ( $\beta = -.44$ ,  $p < .001$ ). Gills, Quaquebeke, Knippenberg, Digke and Cremer (2015) conducted two studies; one consisted of a sample size of 90 employees and their supervisors of a Dutch Research panel, and the second experimental study consisted of 96 Dutch university students, and in both the studies the conclusion was the same, i.e., followers with high moral attentiveness tend to exhibit more deviant behaviors to low ethical leadership as compared to those who have low moral attentiveness.

The social exchange theory also stresses and supports the hypothesis that employees reciprocate in the same fashion (positive/negative) as treated by their supervisors. If the supervisors are ethical and promote ethical behavior, the response would also be of a positive nature, i.e., employees would exhibit positive behaviors, which means there would be less room for negative behaviors.

The result also validated our second prediction (hypothesis 2a). It indicated a positive and highly

significant relationship between Ethical Leadership and Psychosocial Safety Climate. This result is in line with the previous study by Walumbwa and Schaubroeck (2009) who found out that the ethical leadership has a positive relationship with employee's constructive behavior (voice behavior) mediated by a climate of psychological safety. This implies that ethical leadership influence the feeling of confidence in employees for expressing their views about work process without fear of unpleasant consequences, reflecting their perception of psychological safety induced by their ethical leaders.

Contrary to our expectation, hypothesis 2b was rejected. This means that Psychosocial Safety Climate does not reduce deviant behaviors directed towards the organization by employees. Past studies have linked psychosocial safety climate with ethical leadership and individual stressors like fatigue (e.g. Garrick, Mak, Cathcart, Winwood, Bakker, & Lushington, 2014) and interpersonal deviances. For example, Law, Dollard, Tuckey, and Dormann (2011) found that Psychosocial Safety Climate was negatively associated with workplace bullying and harassment (interpersonal deviances) and in-turn psychological health problems. Through this study, we wanted to explore the relationship between Psychosocial Safety Climate and other dimension of Workplace Deviance, i.e., Organizational Deviance. One possible explanation for the hypothesis rejection is injustice and unemployment situation in Pakistan. Here, the law and order system remains beleaguered by continuous inequity, unfairness, operational inefficiencies, exploitation by power and money, lack of resources, and corruption by the higher authorities in almost every industry, as a result of which a great mistrust prevails in the hearts of common Pakistani citizens. This mistrust in the institutions and its employers is one of the biggest hurdles in developing Pakistan as a civic society. We see unrest among people in Pakistan every day. Some are agitated, frustrated and some resist by showing deviant workplace behaviors like work slowdown and protest. This kind of unrest is observed among doctors community in Pakistan repeatedly. Injustice is said to be the root cause of collective action (Kelly, 1998). In a study by Ahmed, Kiyani, and Hashmi (2013), injustice was found to be a significant predictor of workplace deviance among nurses and doctors in Pakistan. The doctors were found to be more deviant than the nurses because of the higher expectations in terms of salary, compensation and benefits. Beside injustice, there is also a problem of lack of job opportunities in Pakistan; therefore, employees stick to their jobs even after great discontent. Due to these two very important factors, psychological safety is no longer very important for employees in Pakistan as compared to the employees in the Western world. People in the west do not have to worry about inequality, promotions, job

insecurity or unemployment issues, which is the reason why psychosocial safety climate is vital for them. On the other hand, there are adverse factors that need to be addressed first in Pakistan for the impact of Psychosocial Safety Climate to reduce Organizational Deviance to take effect.

Since the relationship between Psychosocial Safety Climate and Organizational Deviance could not be established, we could not run the mediation steps, as according to Baron and Kenny (1986), we need to first confirm three conditions; first, the independent variable (Ethical Leadership) should predict the dependent variable (Organizational Deviance); second the independent variable should predict the mediator (Psychosocial Safety Climate); and third, the mediator should predict the dependant variable. The first two conditions were met, but out mediator, i.e., Psychosocial Safety Climate was not predicting the dependent variable, i.e., Organizational Deviance. Hence, Psychosocial Safety Climate is partially mediating the relationship between Ethical Leadership and Organizational Deviance.

The result of our study validated our last hypothesis (3); there is a significant impact of Union Commitment on the relationship between Ethical leadership and Organizational Deviance, such that increase in union commitment would weaken the negative relationship between ethical leadership and organizational deviance. Thus saying that increase in union commitment would limit the impact of ethical leadership, which otherwise plays an important role in minimizing the deviant behavior directed towards the organization by its employees. A possible explanation of such a result can be attributed to Social Exchange theory. Individuals reciprocate to behaviors with more perceived benefits. If employees perceive that their leaders are legitimate role models who exhibit and provide rationale for the benefits of exhibiting normatively appropriate behavior, employees would, in turn, reciprocate that behavior in the form of helping or citizenship behavior. They would feel indebted to fair, honest and caring behavior of their ethical leaders that, if not reciprocated with more citizenship behavior, the least likely would be that they would exhibit negative behavior at workplace like organizational deviance. However, when organization and individual's interest are in sharp conflict, then employees feel the need to become the member of the union because of the greater perceived benefits provided by the union. The conflict usually arises when employees feel perceived inequity and injustice, and when unions provide them with the support to voice against an unjust environment (through militant participation) and greater perceived probability or restoring equity at the workplace. The members would reciprocate by increasing their commitment to the union based on greater perceived benefits as compared to perceived benefits by behaving

ethically.

### Research Limitations and Future Research Directions

Out of 1142 hospitals all over Pakistan, only 12 were covered in Bahawalpur, Islamabad and Rawalpindi. This is due to limitation of time, travelling resources and references. With limited references, all the doctors could not be reached. Another reason is the busy schedule of the doctors and their disinterest in research studies that even hospitals within reach were not welcoming. For this study, convenience and snow balling sampling technique has been used to collect data, thus every recipient did not have an equal probable chance of getting selected for this study. Moreover, this study covers one industry only, i.e., health care industry; therefore, we cannot assume the same results for other industries as well. Furthermore, the recommendations are chalked out according to this particular industry; it will cater to particular needs and cannot be implemented in other industries without proper research. The results have been carefully analyzed keeping the context in perspective, i.e., Pakistan. Therefore, we can expect similar results in countries with cultures similar to ours, but this cannot be assumed for studies in countries with different cultures. All this limits the generalization of our results.

Following are some suggestions for future research work:

According to Barling, Weber, and Kelloway (1996), training is an important factor in developing transformational leaders. Therefore, Brown and Trevino (2006) suggested that Organizational leadership training can be helpful in developing moral reasoning of ethical leadership. Hence, Organizational Leadership Training can be taken as an antecedent of ethical leadership to enhance their moral reasoning and better prepare them to handle complex ethical issues, leading towards reduced workplace deviance by the employees. Moreover, a meta-analysis by Dirks and Ferrin (2002) found that trust in leadership was strongly associated with employees' job satisfaction, citizenship behaviors and performance. Therefore, Trust in leadership can be taken as a mediator between Ethical Leadership and Workplace Deviance, or ethical leadership and citizenship behavior/job satisfaction/performance of the employees.

According to Resick, Hanges, Dickson, and Mitchelson (2006), the components of ethical leadership vary across cultures. Therefore, Brown and Trevino (2006) suggested that ethical leadership should be further explored in different cultures to have a greater understanding of this phenomenon.

The model used in this study can be amended as suggested above and used on a larger sample size in the same health care industry of Pakistan. Respondents' have

been reluctant in recording their deviant behavior during the survey. For more accurate results, the dyadic data analysis can be done where deviant behaviors of employees should be reported by the leaders. In addition, since union commitment as a moderator has been a significant finding in this study, the same moderator should be used to study the impact of suggested relationships in higher education sector of Pakistan. In public universities, the student union influences greatly of what happens in their universities; therefore, the research study may produce interesting results and contributions to existing literature.

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# **ANTECEDENTS AND OUTCOMES OF KNOWLEDGE MANAGEMENT PRACTICES: EVIDENCE FROM PAKISTAN**

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## **ABSTRACT**

**The purpose of the study was to examine antecedents and outcomes of knowledge management practices in education sector of Pakistan. Leadership, culture, technology and competence development were used as antecedents. The data were collected from public and private sector universities and NGOs across Rawalpindi/Islamabad region. The results indicated that leadership has positive impact on knowledge management practices. Similarly, culture, technology and competence development positively impact the knowledge management practices as well. Ultimately, the results concluded that knowledge management practices positively and significantly impact organizational performance. Study limitations and future research directions are also discussed.**

## **INTRODUCTION**

Knowledge management has become critical in the contemporary business environment that mandates continuous adaptation and change by organization, and requires employees to strive to improve their company's work process. It can help organizations to gain competitive advantage and improve organizational performance. It's the reason that knowledge management literature has been growing in last two decades. Because it is a burning issue of today's world of management and effective professionals had always recognized its importance. These professionals enlightened not only professional techniques, primary skills, best methods, learning organizations, and business storage but they also recognized that their organization's key resources are organizational structures, business, and its individuals, their knowledge and abilities (Quintas, 1999).

With continuous toil, resultantly, these professionals concluded that the best technological innovation are necessary for monopolies in specific marketplaces but many companies have recently come to know that maintainable source of the very competitive knowledge is also important. Actionable knowledge represents the appropriate view and details being available in the right place, at the proper time, in the right perspective and in

the right way to anyone who can carry it to make better decisions (Harrison and Leitch, 2000). Knowledge is the key source in brilliant selection, predicting, style, preparing, research, assessment, and user-friendly outcome creation. It is established and distributed between personal and combined thoughts of team or group. It does not develop out of data source but, is modified with experience, achievements, breakdowns, and discovering eventually.

In a learning company, management remains careful to visualize problems and to present alternative solutions to overcome all these issues. Organization develops strategies to strengthen necessary skills; essential for the development of the company. Similarly, difference in group features impact on desired outcomes for advancement and business efficiency. It is, therefore, imperative to assess the effect of group features on the comprehension management system, advancement and company efficiency. The major issues which have been raised from above discussion are to check that which type of knowledge practices are important for organizational performance. The main problem which can be concluded is that whether knowledge practices will improve the organizational performance, and at what level.

This study will provide a profound benefit to the all level managerial personnel. It will help identify crucial

factor of business culture as a component of belief in workers and will make policies according to most suitable in a diversified individuals. The more people believe in each other, the more likely is the result that they could socialize and share their knowledge with each other. This study should be a useful record in the work of alignment of the organization towards efficiency where knowledge workers perform a critical role; henceforth, it would be truly appropriate for the organization to make use of it. Creation of environment and knowledge is an important part of socio-economic factors, emotional aspect and human management methods.

### LITERATURE REVIEW

Knowledge management (KM) provides the significant concerns of business adoption, success, and experience in the face of progressively more discontinuous ecological change. Ahmad, Fiaz and Shoaib (2015) indicated that knowledge management activities i.e. knowledge acquisition, knowledge conversion, knowledge application and knowledge protection, result in provision of quality services to customers, high customer satisfaction, efficiency in resource utilization, more profits and overall improved organizational performance. Zack, Mckeen and Singh (2009) founded that KM practices were found to be directly related to organizational performance which, in turn, was directly related to financial performance. There was no direct relationship found between KM practices and financial performance. A different set of KM practices was associated with each value discipline (i.e. customer intimacy, product development and operational excellence).

Primarily, it represents business procedures that search for a complete mixture of data and details producing a potential of details for technological innovation, and modern potential of human beings (Malhotra, 1997). Wong (2005) mentioned that many companies in the international market, especially the bigger ones, are aware of this, and they try to discover the area expertise management in order to strengthen and maintain their competition. Bethel (1998) suggests that the good leadership has the ability to make an impression on others. Bohn (2002) recommend that leadership is a source to create a clear perspective, and provide self-confidence to their helpers. It is possible with the help of cooperation and interaction with details. Heilbrun (1994) said that the leadership ideas have three steps for conversation. The first thing is to determine management. The second phase is the mindset of management which has to be made up at the idea of innovator mindset. The third phase is to focus

on how they synchronize and work with individuals and issues effectively and are contented with the issues between management and helpers (The idea of leadership contingency). Burns (1978) and Bass (1997) suggest that on the platform of lately released leadership idea, we can split the leadership concepts into agreement leadership and change leadership.

Kim & Shim (2003) and Pounder (2001) recommend that the agreement leadership is consumed by needs, which concentrates on essential and sideline fulfillment against needs. It has a conventional procedure to management and its aim is to sustain the balance of the company. A company's drawback to change to deal with the ecological demands and ambivalence is a situation for which many possible condensate and alternatives are provided. Schein (1985, 1992) recommended a strategy to this problem that is very well-known and commonly mentioned. According to that theory, the company's culture causes drawback at a main level which necessitates changes. Company's past and present logic, encounters, viewpoint, and principles that carry it together, and is indicated in its self-image, inner technicalities, relationships with the outside world, and upcoming objectives is known as culture of a company. There are two kinds of management: one of them is developing a culture when the others are developing categories and companies. When the culture is designed then they find the requirements for leadership and then choose who the innovator is. When the culture becomes malfunctioned, it is the particular procedure of leadership to comprehend the running and malfunctioned aspects of the current culture and to deal with social progression and adjustment in such a way that the team is still available in a changing atmosphere (Schein, 1992).

Technical impulsion has changed the way we convey, store, share and exchange data at low cost and broadband. The option on every employee's pc has made more details rapidly available than it ever was. IT systems enable the Integration of details and Knowledge in the organization as well as the development, transfer, storage and safe-keeping of the company's Knowledge resource. When the company is experiencing inadequate results, there is discontentment with these resources (Rigby, 2001; Rigby & Bilodeau, 2005) which are committing an affordable sum of money and attempt in the employing of ICT-based KM programs (Rigby & Bilodeau, 2007). Technical innovation can be seen in two significant ways from a new institutional point of view. According to Rowan (1977), Technical innovation is the "core" that discloses the way in which work is actually done. So it should be secured and stored from business demands and misconceptions. Important sizing of the company can be showed by the technical innovation, and the institutional stage helps to protect this primary from

exterior demands. Thompson (1967) is comfortable with the fact that the company's part is to adhere to logical misconceptions and a technological stage which has the part of accomplishing the instrumental operation of the company such as generating products or accomplishing services.

Mark McClelland presents the idea of "competency" into the HR literature. McClelland's theory mentioned that the job analytic techniques to employees choice was the offer to test for experience, intellect examining and the conventional job analytic techniques to employees choice and the growing discontentment. Ulrich (1998) states that through abilities, individuals' expense as part of intelligent expense can be observed. Bontis and Fitzenz (2002) suggested that comprehension, ability, and experience of employees symbolize from individuals expense, whereas, codified comprehension, and relational expense symbolizes comprehension included in the business value string through structural expense.

Competencies elements consist of the effectiveness of knowledge and skills, choice, drive and their use of will. In the old economic climate, due to mentioned group quantity, attentiveness and efficiency, the mental part of competencies were primarily fostered. The mental part of competencies leads towards the making of satisfied individuals.

### Knowledge Management Practices & Organizational Performance

Lin et al. (2008) state the degree to which organizational objectives are met and measured by organizational performance. Matin et al. (2009) contend that organizational performance can be measured by worker performance and value addition and it can be enhanced by specifying the organizational culture and procedures to serve customers. Knowledge has to be used to support the firm's processes and to impact organizational performance. According to Cohen and Levinthal (1990); Seleim and Khalil (2007); Zahra and George (2002), the knowledge gained by the organization can be utilized to transform potential capability into a realized and dynamic capability that improves organizational performance.

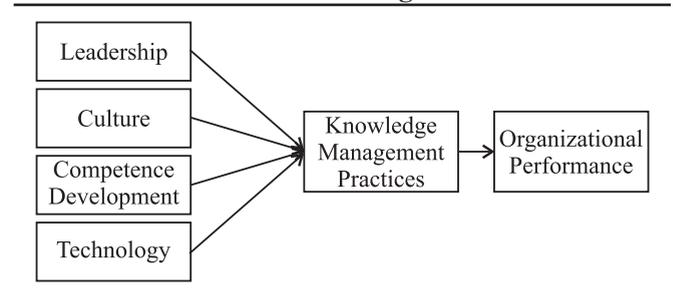
An investment in knowledge always plays an excellent role in the development of the company. Increased realization of knowledge as the core competence (Prahalad & Hamel 1990), coupled with recent advances in information technology such as intranets and the World Wide Web, has increased organizational interest in the topic of knowledge management. Examples of known knowledge management initiatives include Andersen's Knowledge Xchange, Booz Allen & Hamilton's Knowledge On-

Line, CAP Gemini's Knowledge Galaxy, Ernst & Young's Center for Business Knowledge and Monsanto's Knowledge Management Architecture.

## FRAMEWORK

On the basis of literature review, some of the variables have been framed which are depicted in the schematic diagram

**FIGURE 1**  
**Schematic Diagram**



## Hypotheses

In view of the variable established in the schematic diagram, some of the hypotheses have been made as under:

*Hypothesis 1. Leadership has significant effect on Knowledge Management Practices.*

*Hypothesis 2. Organizational culture has significant effect on Knowledge Management Practices.*

*Hypothesis 3. Competence Development has significant impact on Knowledge Management Practices.*

*Hypothesis 4. Technological advancement has significant impact on Knowledge Management Practices.*

*Hypothesis 5. Knowledge Management Practices has significant impact on Organizational Performance.*

## METHODOLOGY

### Population & Sampling Frame

Population of this research has been placed at the workers of corporate industry including public and private universities. NGO's, along with its offices in

Islamabad and Rawalpindi areas in Pakistan are also made part of the research. Thus, the example shape includes the upper and middle management of the stated agencies. List of the example size includes the 500 employees of the aforesaid agencies in various areas in management levels.

**Sample & Respondents**

The research would be implemented in business industry of Pakistan. Random choosing methods were used for the submission of the surveys. Five hundred (500) surveys were spread among the workers of business industry containing universities of government and semi-government status, NGOs, etc. The focused population for this research is experts (managers, instructors and managing personnel of the aforesaid industries) who have been with the company for more than three years.

**Questionnaire & Scale**

The range used by Davenport & Marchand (1999) was implemented to measure the leadership of the company. The statistic range of leadership contains four products. The statistic range for culture was implemented from the research of Liao (2010). The societies in the company were measured through three products statistic range. The statistic range for technological innovation was used from the research of Kostova & Roth (2002). Six products statistic range was used for the statistic of technological innovation. The research device consists of elements to cover information of workers in the given industry. Each item was calculated on the five-point Likert range varies from highly disagree (1) to highly agree (5).

**RESULTS**

The results of the table indicate that knowledge management practices have a significant impact on competency development of the organization and account for 100% amplification in the competency development of the organization. The critical ratio exhibits that knowledge management practices in an important determinant of competency development of the organization.

**TABLE 1**  
**Regression Weights**

	C.R.	P-value
Leadership	6.790	0.000
Culture	9.733	0.000
Competency Development	6.555	0.000
Technology	12.65	0.000

The results of the table further reveal that knowledge management practices have a positive impact on technology in the organization. Knowledge management practices report 11% intensification in technology. The high critical ratio of knowledge management practices divulges that it is an important factor of technology in organization. The results of the table indicate that knowledge management practices have a significant impact on culture of the organization and account for 77% amplification in the culture of the organization. The critical ratio exhibits that knowledge management practices is an important determinant of culture in the organization.

Similarly, the results further reveal that knowledge management practices have a positive impact on leadership in the organization. Knowledge management practices report 98% intensification in leadership. The high critical ratio of knowledge management practices divulges that it is an important factor of leadership in organization

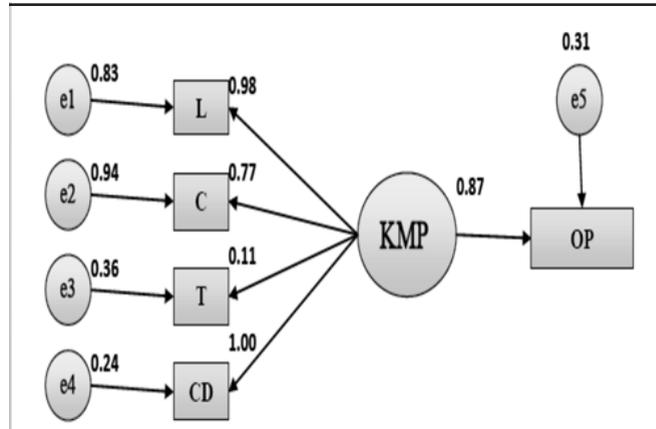
**TABLE 2**  
**Regression Weights**

	S.E.	C.R.	P
Organizational Performance	0.031	26.106	0.00

The results of the Table 2 indicate that knowledge management practices have a significant impact on organizational performance in the organization and account for 81% amplification in the organizational performance in the organization. The critical ratio exhibits that knowledge management practices is an important determinant of organizational performance in the organization.

**TABLE 3**  
**Model Fit Summary**

	Estimate	C.R.	P	
Organizational Performance	KMP	0.86	20.1	0.00



The results of the table designate that knowledge management practices have a significant effect on organizational performance in the organization and account for 86% intensification in the organizational performance in the organization. The critical ratio exhibits that knowledge management practices is an important determinant of organizational performance in the organization.

## DISCUSSION

This research indicated the resulting value of leadership and leading habits to deal with modern issues of the internal and external environment. Leadership attributes have positive mindset of importance towards dealing with knowledge methods in the company. The leadership is in agreement towards the impact of Knowledge management to effectuate the maintaining of advancement of the company. This research provides position of leadership and its fusing impact on the knowledge rendering. It is significant to innovativeness. Leadership concerns strongly with distribution and cooperation of knowledge to the very impact of the methods of knowledge management in the company. Past studies support the current results of the research and show that leadership affects significantly on the knowledge management methods (Barling, Weber & Kelloway, 1996; Barling & Helleur, 2000; Merritt, 2003). Leadership converge the individual's ability to focus on perspective and produces capacity of development and be determined to achieve the competitive advantage and ongoing advancement (Wellins & Weaver, 2003).

Technological innovation is inevitably required for any company to keep itself aware and make the effort with ongoing international change (Stuedemann, Ardichvili, Maurer, Li, & Wentling, 2007). Technological innovation infusion becomes a success, and companies exploit it as a significant expense and it was demonstrated by the earlier researches (Davenport et al., 1998; Alazmi & Zairi, 2003; Artail, 2006; Hasanali, 2002; Hariharan, 2005; Wong, 2005) that KM by means of technology makes it possible for the knowledge management methods.

## CONCLUSION

The study examined how knowledge can be shared within and outside the firm throughout the progression of culture in organization. The culture should bring the organization knowledge and resources and its efficient using of core skills to achieve goals and results. The research divulges a significant connection between leadership and knowledge management methods. It is clear from the research that emotional intelligence

plays a huge role in improving leadership in company which in turn contributes better knowledge management methods. This connection enables the company to know about the influence of HR management to accomplish the goals and objectives of company. Business culture is, however, comprehensive and multifarious. It consists of several factors that are created into an organization's environment of norms, values, attitudes, and business meetings (Miller, 1995; Blackler, 2000; Rastogi, 2000; Gupta and Govindarajan, 2000). The materials also present a framework for explaining the connection between culture and Knowledge management methods by realizing that culture is an essential aspect in knowledge management methods. In addition, culture is essential to successful knowledge management method.

## Limitations and Future Research

Even though model of the research is examined and test outcomes of the research are mostly helpful since the participants of the research offered the test information, possibly there would be variations or choices, which may survive due to different personal encounters, family and instructional as well as work-related experience. This research was performed in business and NGO's in the investment places due to time and cost difficulties it would be further improved in different provincial places. Hence, the provided outcomes should be overlooked to incorporate the common case. However, it may provide essential referrals for the companies placed in other places or nations around the world whose conditions are just like those in Pakistan. This research courses towards the long run line to research on the same factors as the consultant market and developing the style with their systems and functions. The move of knowledge and storage with the worried workers at appropriate destinations and individuals outside the company is recommended to aid and obtain further success.

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# IMPACT OF OPENNESS TO EXPERIENCE ON KNOWLEDGE SHARING UNDER THE MEDIATING EFFECT OF INTENTION TO SHARE KNOWLEDGE AND MODERATING ROLE OF INTERPERSONAL TRUST

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## ABSTRACT

**The purpose of the study was to test the relationship between openness to experience and knowledge sharing under the mediating effect of intention to share knowledge and moderating effects of interpersonal trust. The data were collected from employees working in the public sector in Pakistan, with the sample size of 185. The results indicated that openness to experience significantly and positively predict knowledge sharing among employees, although the results showed that intention to share the knowledge does not mediate the relationship between the two. Similarly, as per findings, interpersonal trust failed to moderate the relationship between intention to share knowledge and knowledge sharing. Implications of the study are also discussed which provide a way forward to decision makers in the organizations in finding how to use knowledge sharing in the contextual settings of Pakistan.**

## INTRODUCTION

Now-a-days, knowledge is considered as a leading resource of any organization. Such importance is derived from the fact that knowledge is the key antecedent for creativity and ongoing innovation in any organization. Through effective utilization of knowledge, an organization may achieve sustainable competitive advantage (Foss & Pedersen, 2002). Hence, managing knowledge demands due consideration to ensure desired organizational performance.

Knowledge sharing is among key elements of knowledge management. It has become necessity of every organization owing to its broad utility (Asrar-ul-Haq, Anwar, & Nisar, 2016). According to Witherspoon, Bergner, Cockrell, and Stone (2013), knowledge sharing is a building block for the success of the organization and it is being adopted as a survival strategy. Knowledge sharing in teams has been found to lead to superior team performance (Srivastava et al., 2006). Knowledge sharing actually entails set of behaviors necessary for exchange of knowledge in possession. This activity transforms individual knowledge into organizational knowledge (Li, Montazemi, & Yuan, 2006). Sharing knowledge helps in developing healthy learning environment within the organization.

Knowledge sharing behaviors are likely to be influenced not only by personal motivations but also by contextual forces (Yoo & Torrey, 2002). For example, personal characteristics of the individual including age

and gender tend to influence the individuals' knowledge-sharing behavior. Similarly, few innate qualities of the individuals and relative attitude are important antecedents of knowledge sharing behavior (Wasko & Faraj, 2005). Furthermore, organizational behavior supports the tendency towards knowledge sharing (Bordia, Irmer & Abusah, 2006). According to Baker, Leenders, Gabbay, Kratzer, and Van Engelen (2006), characteristics and norms of a team tend to influence the knowledge sharing behavior.

Previous studies show a significant work on different antecedents which play role in knowledge sharing. However, there has been dearth of literature regarding an important dispositional quality of the employee i.e. openness to experience and its relative impact on knowledge sharing (Cabrera et al., 2006). Openness to experience is linked to active imagination, aesthetic sensitivity, attentiveness to inner feelings, and preference for variety, intellectual curiosity, originality and independence of judgment. Individuals with high levels of openness are curious about both inner and outer worlds and are willing to consider new ideas and unconventional values, and they experience both positive and negative emotions more keenly than individuals who score low on openness (Matzler, Renzl, Müller, Herting, & Mooradian, 2008). Previous studies also lack focus on mediating effect of intention to share knowledge. In fact, any dispositional traits or organizational behaviors primarily induce intention towards knowledge exchange among employees. This intention then prepares the

employees to transfer the knowledge whether tacit or explicit to the peers. Thus, this intermediary aspect needs due attention for exploration.

Besides individual trait, interpersonal trust is another important factor that may strengthen the relationship between openness to experience and knowledge sharing. Interpersonal trust is the willingness of a party to be vulnerable (Abrams, Cross, Lesser, & Levin, 2003). Apparently, it may enable knowledge bearer to expose his knowledge to others. Trust is the fundamental factor in knowledge sharing between parties (Mayer, R.C., Davis, J.H., & Schoorman, 1995; Butler, 2001). Trust, because it underpins a willingness to communicate, is also critical for knowledge sharing in teams (Mooradian et al., 2006). However, exact mechanism through which interpersonal trust can boost aforesaid relationship still remains intact. This study will cover the details about how trust can play role in augmenting the intention to share knowledge.

## LITERATURE REVIEW

### Openness to experience and knowledge sharing

Openness is one of the five personality factors from the FFM that has been replicated across Cultures (Cheung et al., 2008). It is the broadest personality domain of the Big Five, including a mix of traits relating to intellectual curiosity, intellectual interests, perceived intelligence, imagination, creativity, artistic and aesthetic interests, emotional and fantasy richness, and unconventionality (Silvia, Nusbaum, Berg, Martin, & O'Connor, 2009; Silvia et al., 2008). According to Costa and McCrae (1987), openness to experience refers to an individual's willingness to explore, tolerate, and consider new and unfamiliar ideas and experiences. Costa and McCrae (1992) further distinguished among six facets of openness to experience, three of which are important in terms of reactions to dissimilarities: ideas (e.g., intellectual curiosity and open-mindedness), actions (e.g., being adaptable, valuing experimentation, and liking novelty), and values (e.g., fluid political and religious beliefs).

People who score high on openness to experience tend to be less dogmatic in their ideas, more willing to consider different opinions, more open to all kinds of situations, and less likely to deny conflicts than people who score low on openness to experience (Costa & McCrae, 1992; LePine, 2003; McCrae, 1987). All these aspects of openness to experience are closely related to the essence of working in a diverse team, as members of diverse teams are more likely to have different viewpoints, attitudes, and ideas (and therefore conflict) than members of homogeneous teams (Cox et al., 1991; van Knippenberg et al., 2004). While working in

diverse teams, members avail numerous opportunities to share/exchange their ideas, views and knowledge in possession.

Among other processes of knowledge management, knowledge sharing (K\_SHARNG) has been identified as the most vital one. As identified by Witherspoon, Bergner, Cockrell, and Stone (2013), knowledge sharing is a building block for the success of the organization and it is being adopted as a survival strategy. Knowledge sharing is defined as the degree to which one actually shares one's knowledge with others across an organization. It refers to the provision of task information, know-how, and feedback regarding a product or procedure through both verbal and nonverbal communication (Shim, 2010).

There are a number of reasons why knowledge sharing is important to organizations (McNeish & Mann, 2010). These include improvements to the "alignment to missions, vision and values, and strategy, joint team accountability, process focus, stronger awareness of customer and competition, a collaborative team environment, and decentralized decision making but consistent with corporate direction" (Tiwana, 2002). Knowledge sharing also reduces time to market new products through improved group processes (Cooper, 2001). Knowledge sharing is critical, as it can contribute to knowledge application, innovation, and ultimately an organization's competitive advantage (e.g., Jackson, Chuang, Harden, Jiang, & Joseph, 2006).

Knowledge sharing is crucial because it enables people to capitalize on existing knowledge bases residing within and outside the organization, thus enhancing their capacity to come up with creative solutions, and enabling their organizations to develop new platforms for the development and introduction of new products and services to the market (Carmeli, Gelbard, & Reiter-Palmon, 2013). Studies that evaluated the role of knowledge and information sharing and creativity have found that both internal and external knowledge sharing led to increased creativity and innovation (Hulsheger, Anderson, & Salgado, 2009).

HR professionals have neglected knowledge sharing for many years; however, with the passage of time, particularly in 2000, they came to realize the importance of knowledge management. Since then, knowledge management and its processes became the foci of HR field (Blankenship & Ruona, 2009). Knowledge sharing can be defined as the transference of knowledge among individuals, groups, teams, departments, and organizations (Crossan, Lane, & White, 1999; Ipe, 2003).

In the literature, knowledge sharing is used in two ways. For some authors, knowledge sharing is mainly seen as part of exploitation (e.g. McElroy, 2003) while others consider it part of the exploration phase (e.g.

Swan et al., 1999). Exploitation refers to the processes where existing knowledge is captured, transferred, and deployed in other similar situations. Exploration, on the other hand, involves processes where knowledge is shared, synthesized and new knowledge is created (McElroy, 2003). However, there is a difference between knowledge sharing as part of knowledge exploration (production) and knowledge sharing as part of knowledge exploitation (integration). Knowledge sharing in order to integrate knowledge takes place from one actor to many others at once ("broadcasting"). Knowledge sharing as part of knowledge production takes place more in the form of discussions, working together to solve a problem: actors define the problem together; discuss options, share knowledge to find a solution together. Within this view, knowledge sharing is not as wide and random as in the previous view, but more focused and structured.

Openness to experience drives towards enhanced imagination, considerations for internal feelings, variety seeking and appealing compassion. People scoring high on openness are often more curious about internal as well as external environments and ready to consider new ideas and unconventional values. Such people always experience every sort of feelings more deeply than individuals scoring low on openness to experience (Costa & McCrae, 1992). In addition, highly open people prefer intellectual curiosity, creativity, flexible thinking, and culture and thereby try to develop more positive attitudes towards new learning experience.

Cabrera, Collins, and Selgado (2006) discovered that openness is a strong predictor of knowledge sharing because openness to experience is a reflection of a person's curiosity and originality which in turn are predictors of seeking other people's insights. Therefore, it can be anticipated that open individuals develop more expertise. As Constant, Sproull, and Kiesler (1996) proposed, individuals with higher levels of expertise are more likely to give useful advice; and less likely to contribute when they consider their expertise to be inadequate (Wasko & Faraj, 2000, 2005). People high with openness score are more engaged in contributing and seeking knowledge. Thus, hypothesis one was developed:

*Hypothesis 1. Openness to experience is positively related to knowledge sharing.*

### **Mediating role of intention to share knowledge on relationship between openness to experience and knowledge sharing**

According to Fishbein and Ajzen (1975), intention is assumed to capture the motivational factors that influence behaviors; it is an indication of an individual's

willingness and readiness to behave. Thus, an individual's intention to share knowledge (INT\_SK) highly determines his/her behavior to actually share knowledge with others. Research has shown that the best way to predict whether an individual will perform a specific behavior is by asking the simple question of if he/she intends to perform that behavior (Alajmi, 2011).

According to the Theory of Reasoned Actions, personality traits are exogenous factors essential for explaining individual behaviors and egoism is a factor influencing attitude. In the field of trait studies, scholars have reported that a relatively stable and consistent relationship exists between organization members' personality traits and behaviors (Chan & Yin-Tsuo, 2015). In other words, personality traits, in numerous circumstances, strongly influence the attitudes and behaviors that organizational members demonstrate. In this study, one of the Big Five personality traits i.e. openness to experience, has been focused. Based on the aforementioned assertions, personality traits are correlated with attitude.

Role of openness to experience has already been discussed towards highlighting importance of internal and external environments to people and their readiness to work with new ideas. Among other attributes, one key element is the intellectual curiosity that fosters a person's thrust for learning new things. Such kinds of people always remain in search for opportunities of seeking knowledge. Through the rule of reciprocity, they tend to transfer their own knowledge to others and then gain knowledge from others.

Thus on such basis, hypothesis two is developed:

*Hypothesis 2. Openness to experience is positively related to intention to share knowledge.*

According to the Theory of Reasoned Actions, the closest determinant of behavior is intention, which is the cognitive representation of the disposition of an individual to perform a behavior. Intention and behavior are different aspects of a functional relation separated in time and there exists a link between knowledge sharing intention and knowledge sharing behavior (Z, 2015). Thus, intention plays a vital role to shape specific behavior of an employee and accordingly, intention to share knowledge has direct effect on knowledge sharing behavior.

Other studies suggest that knowledge sharing behavior of knowledge workers is determined by their intention to share their knowledge. Knowledge sharing behavior refers to the extent to which knowledge workers share their knowledge with their fellow workers (Ajzen, 1991). Intention determines the willingness of an individual to engage in knowledge sharing. In the

theory of planned behavior, a positive intention equates with a high tendency, willingness, and eagerness towards knowledge sharing. This enables a knowledge exchange environment within the organization wherein each employee develops interest towards knowledge sharing whether tacit or explicit (Alhalhouli, Hassan, & Der, 2014).

Thus, it has been hypothesized that;

*Hypothesis 3. Intention to knowledge sharing positively related to knowledge sharing.*

### **Moderating role of interpersonal trust on relationship between openness to experience and knowledge sharing**

The influence of interpersonal trust in general and trust in management in particular on knowledge sharing is evident (Renzi, 2008). Trust is viewed as fundamental for the competitiveness of social organizations given the increased levels of complexity and uncertainty (Sundaramurthy, 2008). Trust refers to a person's belief that individuals engaged in exchanges will make sincere efforts to uphold their commitments and will not take advantage of the given opportunity; in other words, it is one's willingness to rely on others (Rousseau, Sitkin, Burt & Camerer, 1998). Mayer et al. (1995) defined interpersonal trust as 'the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Lee, Gillespie, Mann, & Wearing, 2010)'.

Trust is "a psychological state comprising the intention to accept vulnerability based upon the positive expectations of the intentions or behavior of another" (Evans & Revelle, 2008). According to Hung, Li and Tse, (2011) We use the term interpersonal trust to refer to the extent of a boundary-spanning agent's trust in her counterpart in the partner organization (Zaheer, McEvily, & Perrone, 1998). Trust refers to an implicit belief that a partner will not engage in exploitive or opportunistic behaviors.

In this context, Reliance-based trust is defined as a person's willingness to depend on another. Disclosure based trust is defined as a person's willingness to disclose personal or work-related information to another. This two dimensional model of trust draws on earlier work which identified accepting influence and sharing information as behavioral expressions of trust.

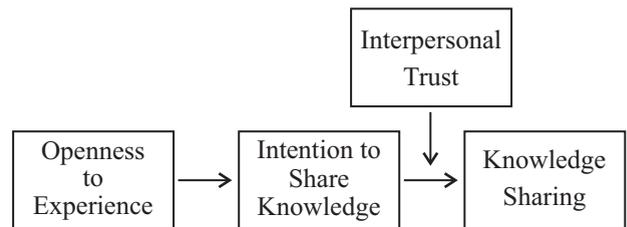
Interpersonal trust is regarded as one factor behind peoples' decision to share knowledge. Prior studies found that trust affects workplace attitudes, behaviors, and performance (Dirks & Ferrin, 2001) Trust can increase

the transparency and initiative of inter-organizational learning (Wang, Yeung, & Zhang, 2011). In this vein, trust has been shown to foster open communication styles, constructive conflict resolution, and free information flow among employees who accepts to communicate more rapidly and in broader scope. This sets foundation for the formal flow of knowledge within the organization. Besides, it also positively influences both efficiency and effectiveness of the knowledge sharing (Muethel, Siebdrat & Hoegl, 2012).

Hence, hypothesis four is established as:

*Hypothesis 4. Interpersonal trust positively moderates the relationship between openness to experience and knowledge sharing.*

## **THEORETICAL FRAMEWORK**



## **RESEARCH METHODOLOGY**

### **Sample**

Sample of this study included employees from a public sector organization who were prior assured of confidentiality. Questionnaires were distributed among 250 employees out of which 185 returned after completion. The effective response rate was 74 percent. Female respondents were 15% of the actual sample. Respondents included employees having diverse educational and professional background. Demographics including age, gender, qualification and experience have been used in this study but control variable has not been decided yet.

### **INSTRUMENTATION**

#### **Openness to Experience**

Scale adapted by Flynn, Francis J. (2005), has been used to measure openness to experience (Cronbach's alpha=0.833) on a 5 point likert scale (1, "strongly disagree," to 5, "strongly agree"). Sample items include "Has an active imagination", "Values artistic, esthetic experiences" and "Is ingenious, a deep thinker".

### Intention to Share Knowledge

Intention to share knowledge has been measured with the scale adapted by Bock, Gee-Woo, Young-Gul Kim, and Robert W. Zmud (2005) (Cronbach’s alpha=0.774) with response scale (1, “strongly disagree,” to 5, “strongly agree”). Sample items include “I will share my work reports and official documents with members of my organization more frequently in the future”, “I will always provide my manuals, methodologies and models for members of my organization” and “I intend to share my experience or know-how from work with other organizational members more frequently in the future”.

### Interpersonal Trust

Scale adapted by Lee, Heeseok, and Byounggu Choi (2003) has been used to assess interpersonal trust (Cronbach’s alpha=0.860) with response scale (1, “strongly disagree,” to 5, “strongly agree”). The items include “Our company members are generally trustworthy”, “Our company members have reciprocal faith in other members’ intentions and behaviors” and “Our company members have reciprocal faith in others’ ability”.

### Knowledge Sharing

Three items scale by Choi, Sue Young, Heeseok Lee, and Youngjin Yoo (2010) has been used to measure knowledgesharinghaving(Cronbach’salpha=0.819)with response scale. These items include “Our team members share their work reports and official documents with other team members”, “Our team members provide their manuals and methodologies for other team members” and “Our team members share their experience or know-how from work with other team members”.

## RESULTS

In order to find support for the direct relationships, mediation and moderation of the proposed model, correlation tests were run on SPSS. Following are the results of the regression analysis:

**TABLE 1**  
**Correlation**

Variables	1	2	3	4
1 OE	(0.833)			
2 INT_SK	.140	(0.774)		
3 Trust	.419**	.147*	(0.860)	
4 K_SHARNG	.577**	.059	.463**	(0.819)

\*\**Correlation is significant at the 0.01 level (2-tailed).*  
\**Correlation is significant at the 0.05 level (2-tailed).*

Table 1 shows the correlation between the variables. As per the correlation results, Openness to experience are significantly correlated with the trust and knowledge sharing, as discussed above. Likewise, Trust and knowledge sharing are also positively and significantly correlated.

### Regression Analysis

Regression analysis was done using Preacher and Hayes method using PROCESS macro. According to the results, openness to experience positively predicts knowledge sharing as the effect size in the total effect is 0.71 and is significant which means hypothesis one is accepted. Similarly, openness to experience is also significantly associated with the intention to share knowledge having effect size of 0.72; hence hypothesis two is also accepted. However, intention to share is not found to be mediating the relationship between openness to experience and knowledge sharing, as there lays a zero value between the upper and lower boot limits of confidence interval, implying that hypothesis three has been rejected.

**TABLE 2**  
**Regression Mediation Analysis**

	Effect	SE	LLCI	ULCI
Total Effect	0.7185	0.0756	0.5694	0.8677
Direct Effect	0.7218	0.0765	0.5708	0.8729
Indirect Effect	-0.0038	0.0147	-0.0502	0.0161

Moderation has also been performed through Preacher & Hayes method. The results clearly show that moderation does not work in relationship between openness to experience and knowledge sharing, because the R<sup>2</sup> change of 0.003 is negligible and found to be insignificant, hence, hypothesis four has also been rejected.

**TABLE 3**  
**Regression Moderation Analysis**

	ΔR <sup>2</sup>	F	P
Int_1	0.0039	0.08974	0.3448

## DISCUSSION AND CONCLUSION

Purpose to conduct this study was to test relationship between openness to experience and knowledge sharing under the mediating effects of intention to share knowledge and moderating effects of interpersonal trust. According to the findings, hypothesis one has been accepted stating that openness to experience positively predicts knowledge sharing. Similarly, hypothesis two has also been accepted and accordingly validated

the hypothesis that openness to experience positively predicts intention to share knowledge.

However, impact of intention to share knowledge on knowledge sharing has not been established resulting rejection of hypothesis three. In addition, interpersonal trust could not moderate impact of intention to share knowledge on knowledge sharing. It depicts that hypothesis four has not been accepted. In this context, it may be noted that current study has focused employees of a public sector organization in Pakistan. It is pertinent to mention that majority of Pakistani organizations especially those of public sector lack supportive working environment in terms of trust among employees and their ability/readiness to share their knowledge with co-workers despite having intention. Apparently, this may be logic behind the rejection of hypotheses three and four.

### LIMITATIONS AND RECOMMENDATIONS

In this study, data were collected from a public sector organization which limits the scope of generalizability. Although, the data were collected from various levels of employees within organization, but relatively small sample size hampers the wider generalizability of the results. Similarly, although respondents were provided with maximum familiarity about questions within available time, however, exposure of employees may differ based upon their intellectual as well as working level. This may cause problem in getting desired response within very short period. Hence, lack of proper understanding of questionnaire may be a limitation.

As far as future research direction is concerned, it will be relevant to include other potential areas to be focused such as role of employee's network position towards knowledge sharing. Similarly, it would be interesting to understand the mechanisms that motivate employees to share knowledge with others such as through different types of relational ties such as horizontal versus vertical ties (e.g., peers versus supervisor-subordinate) and personal friends versus colleagues. Future research also needs to investigate whether there are differences in the type or quality of knowledge shared when it is considered an in-role versus extra-role behavior.

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# IMPACT OF JUDICIAL EFFICIENCY ON FINANCIAL LEVERAGE

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## ABSTRACT

The objective of this study was to investigate the impact of judicial efficiency on financial leverage of 100 firms, listed on Karachi Stock Exchange (KSE), over the period of 2010-2012. Data were collected from Balance Sheet Analysis issued by State Bank of Pakistan (SBP) and reports of Lahore High Court, based on 36 districts. The study also uses explanatory variables including profitability of firms, size of firms, tangibility of assets and growth opportunities that support the judicial efficiency to measure the financial leverage of firms. The results indicate that in worsening judicial system the size of firm, tangibility of assets, and profitability, all have a significant impact but negative relationship with leverage ratios. These results demonstrate in the light of pecking order theory. Only growth has positive significant impact on financial leverage of firms. Finally, result also indicates that the judicial efficiency has a negative relationship but non-significant with financial leverage. The study concludes by discussing policy implications.

## INTRODUCTION

Investors, in making lending decisions, when going to lend the money to borrower the rational creditors, banks and sensible companies will try to investigate or discover the nature of the borrower, as well as the lawful insurance accessible to them in case of the borrower default. At the point when the authorization of moneylenders' rights is poor or expensive regarding administrative expenses and legally time taking transactions, by an alternative instrument lenders are trying to ensure themselves. Because of that purpose, moneylenders as collateral request the fixed security resources, personal guarantees are required, and choose those borrowers with probably low level risk, for example, affluent and well off people, large firms size, and prefer to increase short term loans.

There are two types of collateral, including inside collateral and outside collateral. It is very important to recognize inside and outside collateral, and between personal and real guarantees. Inside guarantee is physical resources or assets owned by the borrower, and it is basically used to request lenders need, in case of default. Outside collateral is resources or assets posted by external grantors, and it expands the potential loss of the borrower in case of insolvency. Therefore, the relationship should be stronger among risk and guarantee in case of outside collateral, given that inside guarantee does not provide additional losses to the borrower in default situation. Without

an individual surety or collateral of fixed resources, borrowers are refused for financing under an inefficient judicial system. This results in less lending in the economy. Also, financial structure of many companies' reduced tendency to finance short-term lenders and only wanting to expand the scope of the progress of the short maturity.

Current development in finance and law literature demonstrated that the development of capital markets is highly dependent on the significance of institutional improvement and lenders' right protection. Various research studies have focused on the country through the contrasts in the nature of law and regulations and protection available to creditors, minority shareholders and the implications of all this on the advancement of the financial framework, and corporate governance, and funding patterns (e.g. Shleifer & Vishny 1997; La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1996; 1997; 1998; 2000; Dehesa, Druck, & Plekhanov, 2007; Djankov, McLiesh Shleifer, 2007).

Previous literature have given proof on inside country judicial effectiveness and corporate financial choices in corporate. Pinheiro and Cabral (1999), Jappelli, Pagano and Bianco (2005) and Magri (2006), in their studies posited that judicial efficiency is related to the general level of the credit in the economy. The goal of this paper is to take step to fulfil the observational distance by giving proof on the productivity of region high courts and its effect on the financial leverage structures of firms in Pakistan.

Numerous ways, in which firms could change extra time to the target debt ratio, are proposed in the optimal capital structure theories. In corporate, there is the use of diverse mixture of equity, debt and hybrid security. Corporate studies recent improvements demonstrate the ideal capital structure, that it is not limited only to choose a certain proportion of equity or debt ought to be utilized, but also involve decision related to debt, including the choice of short-term debt or long term debt (Leland & Toft, 1996; Myers, 1977a; Yi, 2005)

In the research on a study on determinants of capital structure of Pakistani listed firms, Hijazi and Shah (2004) reported that in a total debt of listed firms include the greater percentage of short term debts instead of long term debt. Additionally, Demirguc-Kunt and Maksimovic 1999, Corner et al., 2001, report in developing countries the percentage of short terms debt is higher.

Across countries, there is a rich variety in the legal rights of lenders and in the requirement of contracts. Relatively little is thought about the direct expenses of being spotted in a country with powerless laws and poor property rights insurance. Therefore, when banks offers credit to firms in country having weak creditor rights and poor authorize capacity of agreement, credit spreads will be higher. Additionally, banks will reduce loan sizes and shorten loan maturities.

Recent studies have demonstrated that protected rights of the property are connected with higher estimations of securities exchanges and a higher number of listed firms (La Porta et al., 1997); larger investments made from the external funds (Demirguc-Kunt and Maksimovic, 1998, Rajan and Zingales, 1998) greater value of the listed firms in relation to its benefits (Claessens et al., 2002; La Porta et al., 2002b), and more utilization of outside finance (La Porta et al., 1997, 1998, 2002a).

Other recent studies examine the effect of the judicial efficiency on the amount of loans and its rate of interest. Majnoni and Laeven (2003), studied utilization of total country level information on interest rate spreads from banks' financial statements and looked at the impact of legal property protection rights on the expense of bank credit. Jappelli et al. (2005) and Pinheiro and Cabral (1999) report that even inside a region (country), that there is a regional difference in the impact of judicial efficiency on the amount of loan and its rate. The creditors' power theory proposes that when credit providers become capable and powerful, they can get the control of the firm by implementing contracts through judicial system at low expense and time, they will be more capable, additionally, eager to build and extend the time to get the loans matured.

Inefficient judicial system brings down the chances of recovery of loan by those money borrowers who

are facing monetary hardships and those who are opportunistic. When loan has a long maturity, then there are less chances of loans recovery. If taking into account short term loans, creditors are continuously reviewing and screening financial position and attitude of money borrowers and they can refuse to extend the date of maturity of loans when they see the demand of loans in the market. This attitude may restrict short term loan providers' ability to use the judicial system for the recovery of their loan. Interestingly, long term nature of the loan providers need to hold up till the loan maturity date, i.e. they can't get their money back before the maturity date regardless of the possibility that he realizes their financial position is down falling with time. This implies that the long term loan providers can't utilize the preventive measures before maturity like short term loan providers. Rather lenders having long term loan will need to fall back on court in any situation, such as, a borrower is being unable to pay off his loan, etc. Consequently court will protect the rights of loan providers, and the efficient judiciary will be authorizing the contracts relating loans and it is the most significant determinant of long term loan financing. Here a query arises, 'in Pakistan why do lenders who are facing down fall are afraid of or reluctant to go to the courts against such organisations? Reason can be the inefficient judicial process, expensive methodology, slow and time consuming process of courts prevalent in Pakistan.

This paper's basic objective is to discuss the finance and law relationship and a good effort to fill the observational gap by giving proof on the effect of efficiency of judicial system on listed firms' financing decisions in Pakistan. The particular objectives of the study are:

- a) Evaluating the impact of effectiveness of judicial system on listed firms' leverage decision in Pakistan.
- b) For capital market development, highlighting the significance of efficient judicial system in Pakistan
- c) To highlight the significance of particular characteristics of the firm on which the efficiency of the judicial system is not high or inefficient in financing decision

This study helps to present immediate and in decomposition impact of effectiveness of judicial system on listed firms' leverage ratio. Inside measure the efficiency of the judiciary is controlled by the effect of the structure of the nation through cooperation with quarterly variety of companies, which are arranged on the basis of their characteristics. Screening analysis can be very helpful to know the scope up to which

compounding efficiency of the judicial system affects small and big companies' leverage ratio; those firms having greater and minimal guarantee and those firms which are having less and greater unpredictable money streams. These types of examination are useful in superior strategy plan.

The study will show the significance of efficient judicial system in the capital market of Pakistan for its development. Consequences of the research recommend that the efficiency of the judicial system is very important justification of the listed companies' leverage structure in Pakistan. Policy makers and their partners i.e. SECP, all three stock markets and SBP must understand that the advertisement of long term obligations can't be established but powerful contracts can be formed.

## LITERATURE REVIEW

This part reviews the theoretical structure surrounding a judicial proficiency to financing choices, i.e. the amount of financial leverage. In doing so, preview from already existing applied plus practical research studies is selected. The companies' decisions about financing are examined inexistence of ineffectual judicial system. Every perspective is independently discussed in the certain passages in relationship with ineffectiveness of judicial framework.

### Judicial Efficiency and Leverage

Judicial efficiency is controlled by the way the legal guidelines are actually applied. The judicial frameworks assume an essential part in economic development on the grounds that they have impact in the process of determining and strengthening of property rights and additionally in the evaluating of contract implementation (Arias and Arias, 2007). The principle function of the judicial framework are to ensure the implementation of the legal standards.

Lawful assurance to lenders as well as authorization probably similar by legal framework assumes a significant part in loaning agreements. Protected security might not be enough alone to avoid participants to the credit agreements from taking part in strategic conduct. As argued by Galindo (2001, p.16): 'In case of inefficient organizations might be possible, the alternate participants ought to obtain profits from disowning on the mortgage agreements might be marked sufficiently to keep the agreement's acknowledgment. Therefore, the capacity of these establishments to adjust the participants considerations to the statements of debt agreements may turn into a tool of advancement of monetary expansiveness.'

In an efficient judicial system, there are lower chances

of borrower's opportunistic behaviour. Borrowers will face minor default expenses in an inefficient judicial system. At the point when borrowers already know that through defaulting on the loan they can get more benefits, they will decide to default even when they are finically stable (Eaton & Gersovitz, 1981; Jappelli, Pagano & Bianco, 2005). Creditors will be extremely careful and particularly in making credit, where borrowers have less motivation to reimburse the loan. Uncertainty about the refund of loan will be increased by borrower in a situation of inefficiency of judicial system (Bae & Goyal, 2009). Interest rate will charge higher by lenders when credit risk increases.

### Firms characteristics and judicial efficiency

Creditors give loan to only those borrowers who have the capacity to repay the amount of loan with its interest. The literature recommends there are some business aspects that provide knowledge, related to companies as well as projects nature that the companies attempts. Firm's size as well as collateral proposed towards the credit is such characteristics act as proxies for knowledge accessibility regarding the firm, uncertainty as well as the venture projects nature.

In the following firm characteristics also include the profitability and growth that have broadly been utilized as a part of capital structure analysis. Those attributes don't own direct effect on company's capital framework only. Moreover, their communication along judicial efficiency may hold extra impact on company's capital framework.

### Firm size

According to Pettit and Singer (1985), the imbalance data drawback is extreme for small size firms, while they think that is valuable to create and deliver data regarding themselves. That's the reason small firms are viewed as more difficult than large firms. It is very important to differentiate the high and low quality borrower at the time of lending but the insufficient amount of information creates difficulty for lenders. This will expand the risk of poor selection. Inefficient implementation of judiciary system, lenders will not have the capacity to recover everything of their credit from low-quality borrowers,

Large firms have higher capability for consuming negative external shocks and are thought to be more diversified because of their huge resources base when contrasted with small size firms (Titman & Wessels, 1988). The popular well-known phrase to discuss this sensation is 'too large to flop', which recommends the large size companies bear a minor chances of declining into monetary trouble as well as insolvency, but the small

scale firms are opposite to them. As inefficient lawful application creates problems for financier to recoup their credit from companies in monetary misery, financiers will be charges superior prices on financing to small size firms; either may be refuse to give credit to small firms in some cases. Kumar, Rajan & Zingales (1999), utilizing information on firm's size as a part of Western European nations, found that efficient judicial system are connected with greater average firm size. The effects are greater for commercial enterprises where physical resources are less.

The above discussion about firm size suggests that efficiency of judicial system has more value for firms in small size. When the efficiency of judicial system is lower, credit stream decreases to small firms.

### **Collateral**

The numerous problems connected with data asymmetries can resolve through Collateral. Coco (2000) examines that collateral can resolve different issues caused by irregular information in loan contracts, for example, issues associated with project evaluation, risk about nature of the project, borrowers riskiness, as well as moral risks. Chan and Kanatas (1985) explore that guarantee may support creditor and also borrowers, which have conflict regarding project value because of asymmetry information. As guarantee has a more secure worth as compared project which cash streams will collect later, creditors perceive more secure lending towards collateral, than to take loan towards a risky projects.

Fears related to the riskiness of borrowers or projects can be solved through collateral. Opportunistic borrowers won't prefer to promise valuable resources as collateral towards credits, particularly borrowers along with uncertain plans. Different researches like Bester (1985), Besanko and Thakor (1987), Chan and Thakor (1987) demonstrate that the collateral's worth in addition to average uncertainty of projects are conversely associated; so, profitable guarantees recommend minor risk in project. By determining that data imbalance issue, the credit markets productivity expands by surety. Taking after identical discussion lines, Bester (1985:1987) explore that knowledge regarding dissimilar borrowers poor selection issues disclose through collateral. Moreover, when borrowers realize that their misconduct can bring about loss of the profitable securities, they will ideally neither take part in good hazard projects (Barro, 1976).

The greater part of previous discussion, securities remove issues are associated with imbalance information, subsequently it can be anticipated that ineffectiveness of judicial system influences entire borrowers similarly.

Borrowers along with profitable collateral wouldn't tackle difficult data asymmetry issues and would be less influenced as judicial proficiency decreases. In spite of the above expectation regarding collateral, leverage and judicial efficiency, as examined in Galindo's (2001) study, it might be possible to lose the collateral significance, if creditors feel that they can't get it back through judicial procedure. Magri (2006) explained that in case if borrower will be bankrupt, banks will face minor misfortunes, if the borrowers have more tangible resources in light of the fact that these benefits can act as collateral. Since development options get to be useless when borrowers tackle insolvency and simply recognize the importance of physical assets in a business sector, lender's wish to provide to borrowers along with additional physical resources. That's very fascinating to learn which of the above mentioned challenging discussions remain up into the applied enquiry of judiciary effectiveness and also leverage utilized by recorded enterprises in Pakistan.

Blended applied proof about association of leverage and physical assets exist, when the former is participated with a proxy for effectiveness of judicial framework. Fan, Titman, and Twite (2008) utilized two different proxy for assets tangibility and collaborate them along with a list of crime which quantify how ineffective judicial framework of stated nation securing the lenders rights. Their first proxy for assets tangibility can be evaluated by market to book ratio, it has critical impact on firm's capital structure in many immoral nations and poor judicial frameworks. Although, other proxy evaluated by total tangible assets to total assets, isn't factually important.

An empirical result of Fabbri and Padula (2004) found that, an expression of the fact that weak legal system will redistribute credit against borrowers for more resources. They found that areas where judicial system is weak, credit accessibility to inferior households decreases yet to well off households, it raises. Their outcomes imply that it may be because of the reality that inefficient lawful framework redistribute credit against borrowers for more assets.

### **Growth**

Jensen and Meckling (1976) contended that for growing firms' business expenses of liabilities are greater, while supervisor in these organizations possess the incentives to contribute ideally. Moreover, seize money from bondholders to shareholders. The growing companies have further alternatives to put resources into those projects which consider as risky. Moneylenders expect that those firms can take moral risks for them. Subsequently, moneylenders will be wary of giving credit to developing firms or charge higher interest.

Titman and Wessels (1988), posited that expect opposite relationship among leverage and growth opportunities, however from distinctive point. They observe that while growth opportunities can't be offered as guarantee and don't create current pay, companies that have greater wealthy resources in sort of development chances are relied upon to have less leverage proportion. Myers (1977) recommends that the growth chances are optional; subsequently, thus they shouldn't be sponsored with pricey leverage. Besides, fixed resources consider as sunk expenses and can invest with leverage ideally.

Therefore, in the light of above discussion, a few observational studies discovered the negative relation among company's leverage ratio and growing opportunities. These reviews incorporate Titman and Wessels (1988), Barclay and Smith (1995) and Rajan and Zingales (1995).

### Profitability

Myers (1984) contends that organizations favour internally created finance to external finance and debt to equity funds. This inclination of firms called as pecking request. That's a result of irregular data; the outside funds are more as compared to inside funds. Moreover, the expense of raising equity is greater as compared to the debt costs. Expect lower percentage of debt financing in case of profitable firms. In the view of double taxation, the inverse relation is expected among leverage and profitability. Auerbach (1979) suggested that organizations have incentives to hold income to keep away from dividend taxes (Magri, 2006). It's anticipated that organizations will suppose that it's hard to increase outside funds and also will disperse low benefit where law courts are wasteful. Where judicial system is inefficient, organizations will think hard to raise external funds and will disperse less benefits.

### Hypotheses

In perspective of the aforementioned theoretical framework and experimental proof, only the null hypotheses are recorded for the following testable hypotheses. The null hypotheses can be determined over ordinary way where zero relationship is proposed among the explanatory and explained variables.

### Leverage ratios hypotheses

*Hypothesis 1. In districts where judicial inefficiency is higher listed firms have less leverage ratios than non-listed firms.*

*Hypothesis 2. Inefficiency of judicial system*

*increases, the leverage ratios of large size firms more than small size firms.*

*Hypothesis 3. In districts where judicial system is not efficient, firms have low leverage ratios with little collateral.*

*Hypothesis 4. In districts where judicial inefficiency is higher, growing firms have less leverage ratios than non-growing firms (growth).*

*Hypothesis 5. In the absence of judicial efficiency, higher profitable firms having low leverage ratios than less profitable firms.*

## METHODOLOGY

In this section, source of data, sample size (population) and variables are described with measurement methods. Study has selected convenience sampling methodology. Total 100 companies are selected from different industries from 2010 to 2012 of Pakistan, which are listed in Karachi Stock Exchange KSE. The paper investigates the judicial efficiency impact on financial leverage. The first variable is judicial efficiency that is independent variable. Study found the data on judicial statistics from annual reports of High Court, Lahore that was based on 36 districts. For judicial statistics the sample duration is 2010 to 2012.

The data in the study is taken from secondary, derived the financial data of 100 registered firms in KSE from 'Balance Sheet Analysis Of Companies (Non-financial) Listed at Karachi Stock Exchange'. The data is the publication of State Bank of Pakistan (SBP). Study selected the sample period for the analysis of balance sheet from 2010 to 2012. A data is populated from KSE using annual financial statement of the companies.

## MEASURES

### The leverage measure (Dependent variable)

The leverage basic meaning is Long term debts. The debts in Short term nature will not be used as a source of financing but usually provided by suppliers to firms for comfort. Debts include both long term and short term. Some studies use only long term debts as a proxy for leverage and some use both short plus long term debts. Earlier researches utilized just long term debts as a leverage proxy (Ferri & Jones, 1979; Marsh, 1982; Castanias, 1983; Bradley et al., 1984; Kim & Sorensen, 1986). In the study of Titman and Wessels (1988) also

include short term debts with long term debts as a leverage proxy.

Although, majority of the researches like Rajan and Zingales (1995), Aivazian, Booth, and Demircuc-Kunt, (2001), and Fan et al. (2008) also used both short and long term debts as a proxy of leverage ratios. Major source of financing of corporate sector still rely on banks, in developing countries like Pakistan, in capital structure researches, short nature financing cannot be ignored. In developing economies, the firms mostly rely for financing on banks, which is normally short term in nature. That is one reason behind earlier studies found by Booth et al. (2001), to use short term debts in leverage ratios.

This study uses two proxies to measure the leverage ratios as LEV1 and LEV2. As proxy for LEV1 the ratio of long term debt to total assets is used and for LEV2 using the ratio of total debts to total assets. In total debts include both long term plus short term debts.

$$LEV1 = \frac{\text{Long term debts}}{\text{Total assets}}$$

$$LEV2 = \frac{\text{Total debts (short term + long term)}}{\text{Total assets}}$$

### Judicial Efficiency (Independent variable)

Three types of proxies have been used to measure judicial efficiency in earlier studies for a single country. Proportion of awaiting cases to numerous liable cases initiated in a single year (Fabbri, 2002; Fabbri & Padula, 2004; Jappelli et al., 2005). Proportion of awaiting cases per thousand person in a certain district/region (Jappelli et al., 2005). At last, final proxy includes the average period consuming by province/district court from the initiation of cases to disposal (Magri, 2006).

To measure judicial efficiency, the first proxy is not used, because it's prepared by Business international corporation (BIC), it includes subjective index that's not available in Pakistan's districts. The third proxy average time consuming by province/district court in deciding cases is also not used, because of data unavailability. The second proxy is used in study to measure judicial efficiency due to suitability and availability of data, where unresolved cases are standardized by a few base figures, such as, number of cases initiated in a year (JE1), number of cases disposed of in a year (JE2), given district population (JE3) and at last, also use number of pending cases in banking court (JE4).

$$JE1 = \frac{\text{Number of pending cases in a given district at the end of the year}}{\text{Number of cases initiated during the year}}$$

$$JE2 = \frac{\text{Number of pending cases in a given district at the end of the year}}{\text{Number of cases disposed-off during the year}}$$

$$JE3 = \frac{\text{Number of pending cases in a given district at the end of the year}}{\text{Population of district measured in thousands}}$$

$$JE4 = \frac{\text{Number of pending cases in banking court (where such courts are present)}}{\text{Population of district measured in thousands}}$$

When quantity of pending cases is greater in comparison to disposed-off cases, the result is greater value of JE that reduce the high court's efficiency. That result is showing that high courts are not able to fulfil the interest put on it as compared to other area high courts.

### Explanatory variables

#### Growth

Different proxies are used for growth opportunities. According to Adam and Goyal (2008), the ratio of Market value of assets to Book value of assets is the best proxy to measure the growth. In addition, number of studies concerning investment or debt maturity investigations use ratio of M.V/B.V of assets as a proxy for growth opportunities. This study also uses ratio of M.V/B.V of assets as proxy to measure the growth options.

$$\text{Growth} = \frac{\text{Market value of assets}}{\text{Book value of assets}}$$

#### Firm size

This study uses proxy to measure firm size as Natural Logarithm of total assets. Smaller firms are liable to more insolvency as compared to larger firms, because larger firms' businesses are spread out and their risk is also diversified, whereas, smaller firms always aim at settling their gap of information and smaller firms are so alert in better dealing for the purpose of external financing with lenders (Titman & Wessels, 1988). These results are less reliant of smaller firms on external sources of finance than larger firms, which have lower asymmetry information. So, larger firms have a greater access to the debt financing, as the cost of debt is also low. Another main advantage of larger firms is that they have very less variation in their earnings as smaller firms normally have, so this makes larger firms to get financing from external sources particularly debt a more better option.

$$\text{Size} = \text{Natural Logarithm of total assets}$$

### Tangibility

Tangibility signifies the extent to which the firm is financed by the fixed assets. Normally, firms with more tangible assets tend to have less leverage and accordingly it gets to be complex for them to utilize such assets as guarantee for producing the additional funds which may disclose the firm to insolvency. When making lending decision lenders feel more confident to use tangible assets as collateral has more stable value in market (Chan & Kanatas, 1985). Then again, tangibility might be improve the firm ability to utilize fixed assets as guarantee at whatever point outer funds are obliged inferable from the reason that financed in assets are diverse, which might reduce the possibilities of insolvency. To measure the firm’s tangibility the proxy as the ratio of total net fixed assets to total assets is used.

$$\text{Tangibility} = \frac{\text{Total net fixed assets}}{\text{Total assets}}$$

### Profitability

The two types of proxies have been used to measure firm’s profitability in earlier studies, i.e. Return on equity (ROE) and Return on assets (ROA) (Gill et al. & Muzir, 2011; Alsawalhah & Shubita, 2012). This study uses only one proxy for profitability that is ROA as the ratio of Net income to Total assets. The most popular and widely used financial tool is ROA to certify the strength and returns level that the firm has generated.

$$\text{Profitability} = \frac{\text{Net income}}{\text{Total asset}}$$

This table 3 represents the all variable names that are used in the research including dependent, independent and explanatory variable and the proxies that are used to measure the variables. These proxies have been broadly utilized as a part of capital layout research.

### Model Specification

The multiple regression analysis was done to study the judicial efficiency impact on financial leverage. There is one dependent variables financial leverage structure, so we apply and develop one regression model. The regression model for Leverage

$$Y_{it} = \beta_0 + \beta_1 \text{SIZE}_{i,t} + \beta_2 \text{TANG}_{i,t} + \beta_3 \text{PROF}_{i,t} + \beta_4 \text{GROWTH}_{i,t} + \beta_5 \text{JE}_i + \epsilon_{it}$$

The dependent variables Leverage ratio is denoted by Yit for firm i at time t. The other variables are consider as explanatory variables including SIZE, TANG, PROF, and GROWTH(MVBV). At last, the independent variable is judicial efficiency that can by JE.

$\epsilon$  =Error term or residual which represents the factors affecting the dependent variable not accounting for by the model. Its average value is taken as zero (Gujrati, 2004).

## RESULTS AND DISCUSSION

This section includes descriptive statistics plus outcomes from regressions analysis for leverage ratios.

### Descriptive Statistics

Table 4 shows the review of descriptive statistics of given variables expressed in regression model. To present overall explanation of 100 companies data, those statistics were created utilized as a part of the model also empower the investigators display the information for any apprehensive figure. In the basic measures of descriptive analysis includes the standard deviation, median, mean, the maximum and minimum estimations of variables.

The mean values of dependent variable LEV1 plus LEV2 are 0.321and 0.772, with standard deviation at 0.409 and 0.482. The minimum and maximum values of LEV1 are 0.00 and 4.405. The maximum value of LEV2 is 4.659 and the minimum value is 0.00. At last the median of LEV1 and LEV2 are 0.202 and 0.686.

The descriptive statistics of explanatory variables are discussed further, which are considered as independent variables. The mean value of SIZE is 6.175 and standard deviation 0.651with global minimum and maximum values at 4.411 and 7.753, the median of SIZE is 6.199.

**TABLE 3**  
**Measurements &variables name**

Variable names	Proxies	Measured by
Leverage1	LEV1	Ratio of long term debts to total assets
Leverage 2	LEV2	Ratio of total debts to total assets
Growth	MVBV	Market value per share/book value per share
Profitability	PROF	Ratio of net income to total assets
Tangibility	TANG	Ratio of net fixed assets to total assets
Size	SIZE	Natural logarithm of total assets
Judicial efficiency	JE	Ratio of pending cases at the end of the year to disposed off cases during the year

The variable profitability (PROF) has minimum value of -140.12 and maximum value is 32.50, which mean value is 1.386; further standard deviation and median values are 15.572 and 2.855.

**TABLE 4.1**  
**All variables Descriptive statistics**

Variables	Mean	Median	Std. Dev.	Maximum	Minimum	Observations
LEV1	0.321	0.202	0.409	4.405	0.000	300
LEV2	0.772	0.686	0.482	4.659	0.0001	300
SIZE	6.174	6.199	0.651	7.753	4.411	300
TANG	0.623	0.615	0.192	0.998	0.0116	300
GROWTH	11.541	1.585	71.028	828.78	-496.85	300
PROF	1.386	2.855	15.572	32.500	-140.12	300
JED	37.645	38.321	2.209	39.945	34.670	300

**TABLE 4.2**  
**Correlation Matrix between the variables**

	LEV1	LEV2	SIZE	TANG	GROWTH	PROF	JED
LEV1	1.000						
LEV2	0.752	1.000					
SIZE	-0.516	-0.565	1.000				
TANG	0.245	0.149	-0.446	1.000			
GROWTH	-0.097	-0.175	0.052	-0.118	1.000		
PROF	-0.474	-0.527	0.222	-0.153	0.497	1.000	
JED	0.030	0.020	0.030	-0.016	-0.071	-0.186	1.000

**TABLE 4.3**  
**Regression results of LEV1**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SIZE	-0.445748	0.131282	-3.395361	0.0008
TANG	-0.702372	0.120304	-5.838299	0.0000
GROWTH	0.001098	0.000273	4.024576	0.0001
PROF	-0.010166	0.000871	-11.67327	0.0000
JED	-0.002269	0.003717	-0.610339	0.5423
C	3.597625	0.783390	4.592383	0.0000
Cross-section fixed (dummy variables)				
R-squared	0.936649	Mean dependent var	0.320552	
Adjusted R-squared	0.902862	S.D. dependent var	0.409209	
S.E. of regression	0.127538	Akaike info criterion	-1.011588	
Sum squared resid	3.171858	Schwarz criterion	0.284736	
Log likelihood	256.7382	Hannan-Quinn criter.	-0.492797	
F-statistic	27.72204	Durbin-Watson stat	2.585149	
Prob(F-statistic)	0.000000			

**TABLE 4.4**  
**Regression results of LEV2**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SIZE	-0.648210	0.104693	-6.191521	0.0000
TANG	-0.910532	0.095939	-9.490738	0.0000
GROWTH	0.000865	0.000218	3.973717	0.0001
PROF	-0.011318	0.000695	-16.29684	0.0000
JED	-0.003834	0.002965	-1.293224	0.1975
C	5.492354	0.624730	8.791562	0.0000
Cross-section fixed (dummy variables)				
R-squared	0.970992	Mean dependent var	0.772174	
Adjusted R-squared	0.955521	S.D. dependent var	0.482252	
S.E. of regression	0.101708	Akaike info criterion	-1.464209	
Sum squared resid	2.017172	Schwarz criterion	-0.167885	
Log likelihood	324.6313	Hannan-Quinn criter.	-0.945418	
F-statistic	62.76153	Durbin-Watson stat	2.293666	
Prob(F-statistic)	0.000000			

The minimum and maximum values of variable tangibility (TANG) are 0.012 and 0.998, whose mean and median values are 0.624 and 0.615, its standard deviation is 0.192. The last explanatory variable is Growth opportunities that is denoted with GROWTH measured as MV per share/BV per share (MVBV). The mean values of GROWTH is 11.541, whose median and standard deviations are 1.585 and 71.028. The minimum and maximum value of GROWTH is -496.85 and 828.78.

The mean value of Independent variable judicial efficiency (JED) is 37.645, with standard deviation and median values are 2.209 and 38.321 with minimum and maximum values 34.670 and 39.944.

The table 4.2 is showing the correlation matrix among variables that are used in regression demonstrate that there is no major issue of multicollinearity among variables. LEV1 and LEV2 are negatively correlated with SIZE, GROWTH and PROF that consider as explanatory variables and they are positively correlated with TANG and JED.

### Regression Analysis

The regression model results are discussed under this section. Leverage regression results are presented below.

### Leverage regression results

Results of regression model are shown in table 4.3 and 4.4, which test the stated hypothesis that impact of judicial efficiency on leverage ratios by using Panel least square method. Table 4.3 described the results of

regression where dependent variable is LEV1 which measures as ratio of long term debts to total assets, table 4.4 showing the results of regression where LEV2 is dependent variable which measures as ratio of total debts to total assets. In tables 4.3 and 4.4 the first column represents the name of independent variables. The second column indicates the coefficients of these variables where LEV1 and LEV2 are taken as dependent variable, third column is showing standard errors, fourth column is showing t-statistics, last one is the column of probability of LEV1 and LEV2, which shows the statistical significance level at 1%, 5%, and 10%. The study considers 5% statistical level to check the significance. Strong standard errors present in brackets. Bottom section of the table indicates R squared, adjusted R squared, F-Statistics and some other tests.

The outcomes of the multiple linear regression propose that a significant proportion of the total variation in LEV1 (D.V) and LEV2 (Dependent variable) was projected by explanatory variable.

The variable  $SIZE_{i,t}$  of firm that is statistically significant at 5% level ( $t = -3.395$ ,  $p < 0.05$ ) in LEV1 and ( $t = -6.192$ ,  $p < 0.05$ ) in LEV2 with every one point. Firm  $SIZE_{i,t}$  is negatively correlated with both LEV1 and LEV2, the co-efficient are (-0.446) and (-0.648). A negative or positive sign indicates the direction of relationship. SIZE has negative relationship with LEV1 and LEV2. As size increased by one standard point, it will decrease the LEV1 by 0.446 and LEV2 by approximately, at 0.648 standard deviation.

The variable  $TANG_{i,t}$  is statistically significant at 5% level ( $t = -5.838$ ,  $p < 0.05$ ) in LEV1 and ( $t = -9.491$ ,  $p < 0.05$ ) in LEV2 with every one point. The co-efficient

of TANG in LEV1 is (-0.702) and in LEV2 is (-0.911) that's mean TANG is negatively correlated with both LEV1 and LEV2, both have negative relationship. As TANG increased by one unit, LEV1 will decrease by 0.702 and LEV2 will decrease by approx 0.911. In case of long term financing, tangibility of assets consider important.

The variable PROF<sub>i,t</sub> is related significantly to both LEV1 as well as LEV2 at 5% level ( $t = -11.673$ ,  $p < 0.05$ ) and ( $t = -16.297$ ,  $p < 0.05$ ) with every one point, whereas PROF is negatively correlated to both LEV1 and LEV2. The coefficient are (-0.010) and (-0.011). Anyhow, the economic significance of variable profitability (PROF) is lower. When PROF of firm increases one standard deviation, it will decrease LEV 1 by 0.010 and LEV 2 by 0.011 respectively.

The variable MVBV<sub>i,t</sub>, that is denoted with Growth are statistically significant at 5% level ( $t = 4.025$ ,  $p < 0.05$ ) in LEV1 and ( $t = 3.974$ ,  $p < 0.05$ ) in LEV2 with every one point, the coefficient are 0.0011 and 0.0009 that is positively correlated with LEV1 and LEV 2. This indicates that growth opportunities positively affect dependent variables LEV1 and LEV2. As MVBV positive coefficient indicates that increase in one unit of MVBV will also increase by 0.0011 units in LEV1 and 0.0009 in LEV2 respectively. Although positive outcomes of growth opportunities on financing are credible for small, low levered companies and companies with high growth opportunities. The impact swings to be insignificant in case of large, high levered firms and firms with low growth opportunities.

Table 4.4 indicates the results of regression model where leverage ratio of 100 firms whose listed in KSE regressed on a measure of judicial efficiency. JE plus other explanatory variables are taken from the duration of 2010 to 2012. The dependent variable is LEV2, that is measure as ratio of total-debts to total assets. To measure the SIZE use the natural logarithm of total assets. TANG as the ratio of net fixed assets to total assets. Ratio of net income to total asset as PROF. MVBV is denoted with GROWTH and uses the ratio of market value per share to book value per share.

At last, see the judicial efficiency impact on leverage ratios of the firm. The JE<sub>i</sub> is statistically insignificant at 5% level ( $t = -0.610$ ,  $p > 0.05$ ) in LEV1 and ( $t = -1.293$ ,  $p > 0.05$ ) in LEV2. The coefficient of JE is (-0.002) in LEV1 and is (-0.004) in LEV2, that indicates the negative relationship between JE and with both LEV1 & LEV2. The statistical insignificance demonstrates that its standard error is more than the adequate edge level. As JE increases by one standard deviation, the LEV1 will decrease by 0.002 and LEV2 will decrease by 0.004 with standard deviation, that's show the in-efficiency of courts.

## CONCLUSIONS

This study aims to explore (a) Capital market development, highlighting the significance of efficient judicial system in Pakistan, (b) To highlight the significance of particular characteristics of the firm on which the efficiency of the judicial system is not high or in efficient in financing decision and (c) in Pakistan for capital market development, highlighting the significance of efficient judicial system and different firms particular aspects on financial leverage. Data for this study is taken from Balance Sheet Analysis Of 100 Companies (Non-financial) Listed at KSE issued by State Bank of Pakistan (SBP) for 2010-2012.

To test the relationship among the variables under study the multiple regression models were applied. The results of the explanatory variables demonstrate that the size of the firm, tangibility of assets and profitability & growth all have a significant effect on leverage ratios; the firm's size has greater economic impact on financial leverage. The association among efficient judicial system and financial leverage is statistically insignificant. This may be because of the influence of the organization, which means that the judiciary does not affect the effectiveness of all organizations equally particular possibility firm-specific characteristics are included in the study as a explanatory variables, which support to measure judicial efficiency impact on leverage ratios.

The co-efficient of regression results indicate that judicial efficiency (independent variable) and explanatory variables with leverage ratios (dependent variable) are negatively associated except variable Growth (explanatory variable). Only growths have positive correlation with financial leverage.

Other variables reflect the regression results in the light of the pecking order theory, where exists negative relationship among debt and profitability of companies. When companies become more profitable, expand the size of the company and try to generate internal financing by taking advantage of their tangible assets and to avoid external financing, which is the result of low leverage. In Pakistan, the majority of large-sized and the greater profitable firms with low leverage ratios because they prefer to generate financing from internal sources through the use of own tangible assets. Religious concept is also the main reason of low leverage. Pakistan is a Muslim country; companies do not prefer to take the debt owed to the point of interest opinion, because interest isn't allowed in Islam.

In the end, results from the tests show that the judicial efficiency and leverage ratio have negative and insignificant relationship. Leverage ratio is low in large firms because there is inefficient judicial system in Pakistan. But results showed that the inefficiency of

the judicial system isn't the main cause of low leverage ratio. However, it doesn't imply that judiciary system has doesn't any effect on leverage ratios.

### Policy Implications

Leverage regressions results have crucial implications for development of capital-market and financial deepening.

- a) Improvement of the judicial system in Pakistan that will increase the leverage ratios of both large and small size firm
- b) Change financing models and make new policies for debts that are according to Islamic point of view. That increases the leverage ratios of firm.

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# USING INSOMNIA AS AN EXPLANATORY MECHANISM BETWEEN JOB INSECURITY AND INTERPERSONAL CONFLICT, WITH THE MODERATING EFFECT OF NEUROTICISM

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## ABSTRACT

**Purpose of this research study was to investigate the impact of job insecurity on interpersonal conflict. The study also explores the mediating role of insomnia and moderating role of neuroticism. The survey was conducted on female workers of different organizations located in Pakistan and Azad Jammu and Kashmir. Data were collected using questionnaire from 285 female workers. Results suggested that job insecurity is positively associated with interpersonal conflict, and insomnia plays its role as a mediator between job insecurity and interpersonal conflict; whereas, neuroticism moderates the relationship of insomnia and interpersonal conflict. The study concludes with some implications and provides directions for the future research.**

## INTRODUCTION

Work is a central part of life to many human beings - it fulfils each monetary and social needs. Jobs provide individuals with income, social contacts, possibilities of personal development, as well as daily structure. Previous literature suggests that the nature of work is changing at a quicker pace even for employees who are hired or have survived organizational alternate (Fatimah et al., 2012). Changes in the economic, political and social circles have forced the worldwide organizations to deal with an extensive range of adaptive strategies in order to maintain competitiveness in an increasingly supply labour market (Sverke et al., 2002). Organizations are engaged in the adaptive strategies such as downsizing, right sizing or restructuring (Mauno & Kinnunen, 2002), which are highly characterized in the current working conditions, organizations, in an attempt to survive in difficult economic conditions, are using one of these adaptive strategies. Most current research on job insecurity focuses mainly on its adverse consequences on people as well as on companies (Greenhalgh & Rosenblatt, 1984).

From existing literature, it is examined that job insecurity is basically placed among employment and unemployment, because it typically refers to employed individuals who are concerned about unemployment (De Witte, 2005). Greenhalgh and Rosenblatt (1984) define job insecurity as "the perceived powerlessness to hold the preferred continuity in a threatened job situation". It is the chance of job loss or job discontinuity (De Witte, 1999).

It is most often characterized by phenomena including anxiety and depression (Dekker & Schaufeli, 1995). Additionally, strain-related psychosomatic complaints are suggested as an outcome of job insecurity (Cheng & Chan, 2008). Job insecurity displays the perceived tension about dropping one's task. The situation, often is such that people experiencing job insecurity also generally tend to react to the dissatisfying occasions in ways that have an effect on the organization as well (Sverke et al., 2002).

The main purpose of the study is to broaden and deepen current understanding of the relationship between job insecurity and interpersonal conflict, along with the mediating role of insomnia and moderating role of neuroticism in the organizations of Pakistan. The previous research has shown that conduct of individuals varies throughout cultures and people behave differently in similar situations because of differences in lifestyle (Hofstede, 1983). The study aims to figure out the effect of job insecurity on interpersonal conflict of the female employees working in distinctive organizations. Pakistan is still a growing nation and the percentage of female workers working within the companies is growing by the day; however, the female employees experience job insecurity and fear of losing job as compared to their male counterparts. Therefore, the present study will assist the organizations in Pakistan to understand the fact that how job insecurity results in interpersonal conflict between the personnel in the organization. Going about this course in the study through insomnia as a mediator and neuroticism as moderator, it will have certain

implications within the current literature, theoretically and practically.

Job insecurity is believed to lead to interpersonal conflict, both being counterproductive organizational behavior. As per Social Exchange Theory (Homans, 1961), when an individual at work faces unfavourable situation, he/she reacts in deleterious manner, accordingly. Therefore, when an employee experiences job insecurity, it leads to interpersonal conflict, due to the fear of losing job and at times, inability to do anything substantial about it. Social exchange theory has been offered as a possible avenue for studying the components of employee relationship. This theory attempts to explain interpersonal relationships in terms of transactions of resources governed by the principle of repayment in kind with the actions of one party often dependent on those of the other (Blau, 1964). When employees perceive insecurity at job they feel stressed and in exchange they react and initiate revenge seeking or coping strategies by showing negative behaviors at workplace which leads toward the conflict between the employees.

## LITERATURE REVIEW

### Job Insecurity and Interpersonal Conflict

The term conflict is basically an interactive manner that is contemplated inside the social entities such as individual, groups or organization, in the form of incompatibility, disagreement or variations. Conflict takes place while an individual is needed to have interaction in the activity which is unique with his or her interest (Jehn & Mannix, 2001). It also happens when an individual holds behavioral choices and then he/she discovers that his/her preferences are incompatible, that's applied by way of every other person. Conflict has been employed in one of a kind ways demonstrating different ranges in which the conflict exists (Deutsch, 1990). Conflict at the workplace is considered as common workplace stressor. Basically, conflict at workplace, such as interpersonal conflict, shows a degree of reaction in which an employee behaves negatively to the social interaction with his/her co-workers. Wall and Callister (1995) define interpersonal conflict as "a process in which one party perceives that its interests are being opposed or negatively affected by another party". The previous literature suggests that interpersonal conflict has also been related to the negative emotions and poor psychological states such as anxiety, anger and frustration (Liu, Spector, & Shi, 2007).

In the latest literature, there may be evidence that dropping one's job has unfavourable effects on health, which may fit in such a way which induces a greater

threat of mortality. Despite the fact that job loss has been considered as a traumatizing event, it is far likely not very common. In assessment, the threat of job loss, such as perception of job insecurity, is probably more extensive and one might also marvel its effects as negative as that of actual job loss. Additionally, modern-day financial and economic conditions are a component that is considered vital to discover how personnel are suffering from the growth in call for the flexibility within the work situations (Østhus, 2007). The previous literature counselled that once personnel experience job insecurity, they go through a large number of negative outcomes, which might also negatively affect the organization. From the literature, it has been found that job insecurity is negatively related to job satisfaction, trust, job performance, job commitment and it has been additionally associated with psychological and physical health outcomes (Sverke et al., 2002).

The impact of job insecurity on interpersonal conflict is understood by frustration and aggression theory (Dollarde et al., 1939). Frustration and aggression theory provides the model which proposed that frustration causes aggression, because of which negative outcomes are generated. It is found that in the face of adverse situations at workplace, employees become frustrated and this frustration leads to the aggression. The frustration-aggression hypothesis (Dollarde et al., 1939) shows that frustration takes place when activities interfere with one's goals and the basic response to frustration is aggression, which ultimately, gives rise to interpersonal conflict.

The growing body of literature suggested that feelings of job insecurity within the time of transformation in the agency has undoubtedly associated with the job burnout (Mauno & Kinnunen, 2002), poor communication among the employees inside the organization (De Witte, 2005), and one-of-a-kind forms of conflict within the organization (Hoel & Cooper, 2000). People are in the state of conflict while they may be irritated by way of other person's and unavoidably respond to it in a costly manner (Van de Vliert, 1997).

Hence, as per literature reviewed, the following hypothesis is developed:

*Hypothesis 1. Job insecurity is positively associated with interpersonal conflict.*

### Insomnia as a mediator between job insecurity and interpersonal conflict

Human life is filled with the events that affect the occasional insomnia in a person who typically sleeps properly. However, a large number of people have been

suffering from this situation repetitively, but sometimes, the situation prolongs for an extended period that could remain from some months to several years. Insomnia has been characterized with the aid of delayed sleep disorder, sustained awakenings at some stage in the night time, or early morning awakening (Ford & Kamerow, 1989). Sleep disorder such as insomnia is not unusual in women as compared to men and takes place at disproportionately high charges in older people (Mellinger, Baiter, & Unlenhuth, 1985). The person with insomnia not only experiences poor sleep, however, normally they also complain about daytime impaired functioning. Reports of fatigue, mood sickness, sleepiness, and tension may additionally contribute (Altena et al., 2008).

Literature of epidemiology, public health and occupational psychology have shown that when individuals suffer from the fear of job insecurity it is perilous for the fitness of individual and it is the main cause of increase in the strain and stress (Sverke & Hellgren, 2002). Psychologists are of the view that predication of some occasion and worrying on that is more crucial and it leads to severe anxiety rather than the event itself. More often than not, job insecurity gives rise to self-pronounce and widespread psychological morbidity and bad health (Ferrie, 2001). Mainly, it is significantly related to unique symptoms together with stomach, skin issues, eyestrain, and sleep issues (Cheng et al., 2005). Job insecurity is also negatively correlated with mental fitness (Ferrie et al., 2005). Ample literature posits that job insecurity is one of the leading causes of adverse effects on health of individuals.

Apart from physical and certain psychological symptoms, quality of sleep gets deteriorates due to interpersonal conflict, at workplace. Nakata et al. (2004), in their study on white-collar employees established that the employees who were facing severe intra- organisation conflict were experiencing relentless insomnia threat. Similarly, when they conducted the same study in business sector, the results showed that a large number of male employees, who were facing more interpersonal conflict at workplace, had much more risks of certain sleep disorders (Nakata et al., 2008). As a result, sleep related health troubles arise preceded by interpersonal conflict at work. Specifically, job insecurity, can contribute to autonomic arousal and emotional misery, all of which lead to extended insomnia (Bonnet & Arand, 1997; Harvey, 2002). Job insecurity may additionally cause intrusive and traumatic mind, namely to rumination, a cognitive notion, which is characterized by means of a focus on the beyond and concerns subject matters of loss. Those repetitive minds can also intervene with people's potential to fall asleep, as has been proven in past research (Carney, Harris Moss, & Edinger, 2010). From the above debate, it has

been analyzed that job insecurity is positively associated with interpersonal conflict. So when job insecurity leads to sleep disorder among the workers, it resultantly increases interpersonal conflict.

*Hypothesis 2. Insomnia mediates the relationship between job insecurity and interpersonal conflict.*

### **Neuroticism as a moderator between insomnia and interpersonal conflict**

A person's environment is believed to have a deep effect on his/her personality, character and decision making tactics. The role of personality as a moderator has been a subject of interest for years (Costa & McCrea, 1992); although, only a handful of researchers have examined their effects within the context of the social stressor-pressure (Bono, Boles, Choose, & Lauver, 2002). Neuroticism is a personality trait characterized by using an inclination to experiencing low moods and emotional instability (Costa & McCrae, 1980). Neuroticism refers to a negative affect (Eysenck, 1967) and it appears in almost all classifications of different personality types. It refers to an emotional trait in which individual are inspired easily, but their ability to inhibit emotions is slow (Eysenck, 1991). According to Costa and MacCrae (1992) neuroticism refers to a dimension of emotions which are negative versus stability of emotions and their adjustment.

A few people with insomnia revel in symptoms similar to neuroticism. Therefore, it can be said that neuroticism refers to negative affectivity, depression and sort of anxiety (Watson & Clark, 1984), it is a personality trait which is caused by genetic and environment (McRae, Jang, Livesley, Riemann, & Angleitner, 2001). Traits are the tendencies that help people to experience the environment in a different way from others. So neuroticism leads individuals towards emotions, cognitions and behaviours which are negative (Jang, McCrae, Angleitner, Riemann, & Livesley, 1998). So it can be said that disorders in sleep have emotion related (Dahl & Lewin, 2002), cognition related, and behavior related additives (Perlis et al., 1997).

People scoring high on neuroticism may be more prone to workplace conflict. These findings aid the conceptualization that neuroticism will aggravates the consequences of interpersonal conflict. Studies inspecting the moderating function of neuroticism on interpersonal conflict are rare and what has been explored previously has focused on the non-works domain names. People scoring high on neuroticism had been shown to revel in accelerated stages of interpersonal conflict (Bono et al, 2002). Dijkstra et al. (2005) stated similar findings whilst analyzing the role neuroticism plays on interpersonal conflict, displaying

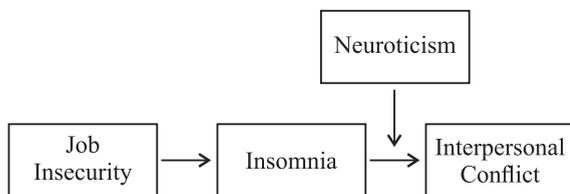
that people high on neuroticism mentioned higher stages of interpersonal conflict. Additionally, Milam, Spitzmueller, and Penney (2009) confirmed that neurotic people perceived more conflict, by the virtue of the fact that those individuals may be predisposed as being demanding, nervous, insecure, prone to self-pity, which might also cause them to seek conflicting situation at the workplace.

It is normally believed that sleep problem is related to damaging situations at work, which further is related to adverse impact on workers' relationships (Kim et al., 2011). Interpersonal conflict is likewise having a bad impact on the employee's relationship; similarly, neuroticism, which is based totally on anger, anxiety, frustration, has similar impact. So the previous literature suggests that neuroticism strengthen the relationship between insomnia and interpersonal conflict. Therefore, the subsequent hypothesis is developed:

*Hypothesis 3. Neuroticism moderates the relationship between insomnia and interpersonal conflict.*

## THEORETICAL FRAMEWORK

FIGURE 1



## METHODOLOGY

The study undertaken focuses on the impact of job insecurity on interpersonal conflict, with the mediating role of insomnia and moderating effect of neuroticism. This is a cross sectional study with the unit of analysis as individuals. The data were collected from the female workers of different organizations in Pakistan. The sampling technique used was convenient sampling due to the time and budget constraints. Total 400 questionnaires were distributed out of which 310 were returned and only 285 were usable. Researcher's interference was minimal and the respondents were assured of the confidentiality of the data.

## INSTRUMENTATION

### Job insecurity

Job insecurity was measured with the 4-item Job

Insecurity Scale by Vander Elst, De Witte, and De Cuyper (2014). A sample item is 'I think I will lose my job in the near future'. The items were rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The value of Cronbach's alpha was found as 0.754 which confirms the reliability and consistency of an instrument used to measure job insecurity in a current study.

### Insomnia

Insomnia was assessed using the Women Health Initiatives Insomnia Scale (Levine et al., 2003). This scale consists of five items and uses a 5-point Likert-type response pattern with Cronbach's alpha at 0.784. The items assessed ongoing difficulties with sleep. A sample item is 'Did you have trouble falling asleep'.

### Neuroticism

For neuroticism, an 8-item scale of Big Five Personality Model of (John & Srivastava, 1999) was used. A sample item is 'I dislike myself'. The items were rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). And the Cronbach's alpha was at 0.712.

### Interpersonal conflict

Interpersonal conflict was measured with the 5-items of (Doucet, Poitras, & Chênevert, 2009). A sample item is 'People often create obstacles for others'. The items were rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). After doing the reliability analysis, the value of Cronbach's alpha was found as 0.812.

## RESULTS

The hypotheses were tested by regression analysis the results of which are as follow:

The findings of correlation analysis, as shown in table (1) indicate that job insecurity and interpersonal conflict are positively and significantly correlated ( $r = .321^{**}$ ,  $p < 0.01$ ). Similarly, a positive and significant correlation exists between job insecurity and insomnia ( $r = .188^*$ ,  $p < 0.05$ ) as well as between insomnia and interpersonal conflict ( $r = .175^*$ ,  $p < 0.05$ ). Likewise, job insecurity and neuroticism are highly correlated at  $r = .229^{**}$ , where  $p < 0.01$ ; along with neuroticism and interpersonal conflict ( $r = .440^{**}$ ,  $p < 0.01$ ). And finally, neuroticism and insomnia are also positively and significantly correlated ( $r = .134^*$ ,  $p < 0.05$ ).

**TABLE 1**  
**Correlation Analysis**

Variables	1	2	3	4	5	6	7	8
1. Age	1							
2. Gender	.00	1						
3. Qualification	.190**	.00	1					
4. Experience	.764**	.00	.340**	1				
5. Job Insecurity	-.118*	.00	-.056	-.230**	1			
6. Insomnia	-.017	.00	.239**	.144*	.188*	1		
7. Interpersonal Conflict	.075	.00	-.220**	.048	.321**	.175*	1	
8. Neuroticism	.261**	.00	.048	.212**	.229**	.440**	.134*	1

**TABLE 2**  
**Results of Regression Analysis for Outcome**

Predictor	Insomnia			Interpersonal Conflict		
	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1						
Control Variable					.067	
Step 2						
Job Insecurity				.248***	.187	.120***
Step 1						
Control Variable					.067	
Step 2						
Insomnia				.080*	.084	.017*

N=285, \*\*\* $p \leq 0.001$ , \*\* $p \leq 0.01$ , \* $p \leq 0.05$ .

**TABLE 3**  
**Mediated Regression Analysis**

Predictors	Insomnia			Interpersonal Conflict		
	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1						
Control Variable		0.92				
Step 2						
Job Insecurity	.167*	.111	.017*			
Mediation Insomnia						
Step1						
Control variable					0.067	
Step 2						
Insomnia				0.080*	0.084	0.017
Step 3						
Job Insecurity				0.239***	0.193	0.110

N=285; \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

The first hypothesis proposed that job insecurity is positively associated with interpersonal conflict. To test that proposition job insecurity was regressed on interpersonal conflict. In step 1, all the control variables (age, gender, qualification and experience) were entered;

the R<sup>2</sup> value is .067. In step 2, job insecurity was regressed on interpersonal conflict and the results showed that it is a significant predictor of interpersonal conflict. Consistent with the proposition job insecurity is significantly and positively related to interpersonal conflict ( $\beta = .248^{***}$ ,

$p < 0.001$ ), thus supporting hypothesis  $H_1$ .

Table (3) shows the results of mediation analysis. The results of mediation analysis indicate that by incorporating insomnia as a mediator, although the relationship between job insecurity and interpersonal conflict is significant ( $\beta = 0.080^*$ ,  $*p < 0.05$ ), the direct relationship between the two variables is far more significant at  $\beta = 0.239^{***}$ , where  $***p < 0.001$ . Therefore, the findings suggest that insomnia partially mediates the relationship between job insecurity and interpersonal conflict, thus leading to the acceptance of mediation hypothesis, i.e. hypothesis 3.

**TABLE 4**  
**Moderated Regression Analysis**

Predictor	Interpersonal Conflict		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Moderation			
Step 1			
Control Variable		.067	
Step 2			
Insomnia	.089***		
Neuroticism	.416***	.276	.210**
Step 3			
Ix N	.355***	.466	.190**

$N=285$ ;  $***p < 0.001$ ,  $**p < 0.01$ ,  $*p < 0.05$ .

For moderated regression analysis following steps of Barren and Kenny (1986) are followed: in the first step, age, gender, qualification and experience were entered as control variables. In second step insomnia and neuroticism were entered to predict the interpersonal conflict. Step 2 shows that insomnia is significantly associated with the interpersonal conflict ( $\beta=.089^{***}$ ,  $p < .001$ ). In third step, interpersonal conflict was regressed on the interaction term of neuroticism and insomnia. The result shows that the relationship between insomnia and interpersonal conflict is moderated by neuroticism, i.e. it strengthens the relationship ( $\beta=.355^{***}$ ,  $p < .001$ ) as shown in Table 4, leading to the acceptance of hypothesis 3.

## DISCUSSION AND CONCLUSION

The aim of this study was to check the impact of job insecurity on interpersonal conflict, i.e. explore that whether job insecurity causes interpersonal conflict in the workplace or not and if it does, then what are the factors leading up to it. The results of the study indicated that there is positively significant relationship among job insecurity and interpersonal conflict; as when female employee feels insecure about her job

it will lead to interpersonal aggression and conflict. Similarly, the results of the study helped establish that insomnia partially mediates the relationship between job insecurity and interpersonal conflict. The reason being that job insecurity is relatively high among female workers that employees are always working under the threat of being a victim of restructuring, policy changes and cost cutting. The results shows that when the female workers feels insecurity about their job its effects on interpersonal relationship is so much high that it can give rise to high level of conflict among employees, lead by psychological health issues, i.e. insomnia, as previously supported by literature.

Similarly, insomnia happens to cause interpersonal conflict in the workplace because both are counterproductive work behaviours; interpersonal conflict is a negative behavior and insomnia causes and increases negative behaviors in the organization, furthermore, neuroticism moderates this relationship by strengthening the impact of negative behavior. As the value of  $\beta$  is highly significant it shows that neuroticism is playing the role of moderator in this specific relationship. This is also supported by prior research, which shows that neuroticism strengthens the said relationship.

## Limitations

There are certain limitations in the study. Current study focuses on female workers of organizations of Pakistan and Azad Kashmir. In order to enhance the conciseness and the generalizability of the research, data from the male workers should also be collected. Furthermore, a relatively small sample size is one of the limitations. A study on bigger sample size can prove useful in order to provide a bigger picture.

## Implications and future directions

The study has certain implications in the specific area of literature. It helps expand the interpersonal conflict relationship with job insecurity. In literature there is very minimal work done on the relationship among job insecurity and interpersonal conflict so it will be an addition to it. The mediating and moderating roles added in this study make it unique as the mediator insomnia is totally a new concept in the Pakistani context. As far as context is concerned, the current study can prove to be vital as there is very limited research on the topic, as far as the developing countries are concerned. The study can be highly useful in the organizational context, giving it certain practical implications. The organizations needs to know that for the growth or development or better environment there is need to provide its employees job security, which will help to create a good and

healthy relationship between employees within the organization.

For future studies, it can be useful to consider some other mediators and moderators and test their impact on this relationship; like personality factors such as narcissism as a moderation to explore how narcissism affects this relationship and will the results be same or not. Psychological factors such as anxiety, frustration and stress can also be added as a mediator in the relationship of job insecurity and interpersonal conflict.

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# IMPACT OF OPENNESS TO EXPERIENCE ON PROJECT SUCCESS WITH MEDIATING ROLE OF CREATIVITY AND MODERATING ROLE OF UNCERTAINTY AVOIDANCE

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## ABSTRACT

**The purpose of the study was to examine the impact of openness to experience on project success with the mediating role of creativity and moderating role of uncertainty avoidance. Data were collected from 100 project managers by using questionnaires. In order to analyze the relationship regression and correlation techniques were used, which indicated the positive impact of openness to experience on creativity. The results of study indicated positive and significant impacts of predictors on response variables.**

## INTRODUCTION

Around the world, managers face an important dilemma which is whether to continue allocating resources towards a project, if its success is dubious. Often the amount of resources already employed may bias the managerial decisions towards letting the project continue. In the last 30 years, project success has generally been subjected to a lot of attention with regard to research in the area of project management (Ika, 2009; Pinto & Slevin, 1988). With the evolution and maturity of our understanding regarding project success (Jugdev & Müller, 2005), we have comprehended the intricacies and obscurities inherent in our ability to measure and define it (e.g. Baccarini, 1999; Fowler & Walsh, 1999; Hyväri, 2006; Ika, 2009; Jugdev & Müller, 2005; Thomas & Fernandez, 2008). Project success is now regarded as a multidimensional construction with the availability of organized procedures, as well as commercial, communicative and strategic dimensions; although, it may not be obvious when measuring project success. (e.g. Bannerman, 2008; Cao & Hoffman, 2011; Ika, 2009; Jugdev & Müller, 2005; Jugdev, Thomas, & Delisle, 2001; Shenhar, Dvir, Levy, & Maltz, 2001; Thomas & Fernandez, 2008). Success of project is often measured quantitatively as simple formula application is easy, and on the assumption that a universally determined criteria for success exists (Ika, 2009). Researchers classified that determination of project progress as success or failure remains challenging and knowledge of project management is not very consistent (Cicmil & Hodgson, 2006). Subjective point of view is that project success is a social phenomenon and created by group of individuals

(Alderman & Ivory, 2011; Ika, 2009; Packendorff, 1995).

Researchers have examined effects of project manager personality on project outcomes in diverse studies, studying personality and categories of projects (Dvir, Sadeh, & Malach-Pines, 2006), leadership competencies (Geoghehan & Dulewicz, 2008), specific personality traits such as conscientiousness and openness to experience (Thal & Bedingfield, 2010), etc. Data available suggests that 5-factor model of personality termed as the "Big Five" (Goldberg, 1990) covers all personality traits under its domain. It has been found to be identical across nearly all cultures (McCrae & Costa, 1997; Pulver, Allik, Pulkkinen, & Hamalainen, 1995; Salgado, 1997) and has remained fairly stable over the years (Costa & McCrae, 1992a, 1988). The model is composed of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Current study focuses on examining openness to experience and how it affects project success.

Openness to experience is a key personality trait, particularly at the initiation of a project when team members search for innovative ideas. This eventually leads the organization to be more innovative in its operations (Salge, Farchi, Barrett & Dopson, 2013). Organizations appreciate innovativeness in their employees and try to instill it through training. Therefore, academics have conducted extensive research to examine the assessment and enhancement of an individual's innovative capabilities in terms of inventions, process and product innovations, technology innovation adoption and new product purchase (Goldsmith & Foxall, 2003, Hyvonen & Tuominen, 2006). In this research, creativity is perceived as the manifestation of creative output imitated in the

result of the creative process carried out by individuals, in an innovative team environment (Woodman et al., 1993). Innovative initiatives by the workforce of an organization are an important basis of an organization's competitive advantage and drive its economic growth. Avoidance of uncertainty is the dismissal of obscurity with the goal of avoiding concerns, to the extent to which a person may feel comfortable in unprecedented situations. This represents fear of uncertain situations and a resistant attitude towards innovation (Steenkamp, Hofstede & Wedel, 1999).

## REVIEW OF LITERATURE

### Relationship between openness to experience and creativity

Openness to experience is one of the factors of big five Factor Model (Costa & McCrae, 1992), which captures that individuals are open minded, imaginative and original (McCrae, 1987). Project team members search for such innovative ideas that eventually lead the organization to be more innovative in its operations (Salge, Farchi, Barrett & Dopson, 2013). Creativity is defined as production of new and hypothetically beneficial ideas and social context and can be seen in project outcomes (Shalley & Zhou, 2008).

Openness to experience increases creativity in performance of employees and use of creativity supports intellectual processes (Zhou, 2003). The previous findings determined that openness to experience predicts creative outcomes and creative processes. Similarly, openness to experience is positively associated to project performance in problem solving producing creative ideas (Leung, Maddux, Galinsky & Chiu, 2008). Openness to experience is positively related to creativity, in numerous domains (Feist, 1998). In organizational settings where there is a weak relation it suggested that impact of openness on creativity might vary in contextual terms (Andrews & Smith, 1996; Burke & Witt, 2002). Openness to experience has access to variety of experiences and perspectives; therefore, it results in creativity in project performance (McCrae & Costa, 1997). Literature suggests that relationship between personal characteristics of openness to experience and creativity is universal (Heine & Buchtel, 2009). Therefore, hypothesis one proposes:

*Hypothesis 1. Openness to experience positively associated with creativity.*

### Relationship between creativity and project success

Project success has two concepts: project management

focusing on processes of projects, successful cost, time and quality management and project success dealing with successful outcome of product for which project was started according to needs of the people (Baccarini, 1999). Exploration of ideas is connected with increasing variance, experimentation, searching for alternatives and it is important for organizational learning as well as for the better outcome of project in form of success (March, 1991). Creativity indicates that self-confidence and consequent independency perceived by project team members help to enhance employee creativity, which will result in employee performance and project success (Barron & Harrington, 1981). Creativity makes employees learn about the fundamental values, identity and motives or goals of the projects (Avolio and Gardner, 2005). Facilitation of tasks to employees makes sure to develop their expertise to perform well and produce an urge for creative work for project (Amabile, 1996).

Thus hypothesis two posits:

*Hypothesis 2. Creativity is positively associated with project success.*

### Relationship between openness to experience with project success

People who score high on openness to experience are more explorative and have divergent thinking, which helps them use more creative ideas and outcomes in form of project success (DeYoung, Peterson, & Higgins, 2005; McCrae, 1987). Openness to experience has higher connection with project success and its creative achievement for the organization and it also tends to individual differences (Carson, Peterson, & Higgins, 2005). Openness to experiences produces creative process to increase cognitive flexibility in organizations and it also predicts individual creative capacity (Eysenck, 1995).

Therefore, hypothesis three was developed as follow:

*Hypothesis 3. Openness to experience is positively associated with project success.*

### Mediating role of creativity

Creativity leads employees to focus on novel ideas which will be useful for the project of an organization to achieve goals. It motivates the employees to explore their interests, engage their curiosity (Mohrman, Gibson, & Mohrman, 2001). Creativity increases the range of cognitive information available expands the scope towards set of ideas and identifies the patterns to encourage the employees to associates between

ideas (Fredrickson, 1998). Creativity makes employees more flexible, willing to take risks and openness to experience reduces complexity, which in outcome expands their access to ideas and potential solution for their project success (Gagne' & Deci, 2005). Cognitive process is such a process in which every person in an organization adopts others' opinions to understand the preferences, values and needs of the project to make it successful (Parker & Axtell, 2001). Personal and contextual characteristics influence the creativity in the organization's individuals, personal characteristics include five factors of personality traits (Gough's, 1979) and contextual characteristics include job complexity, goals and deadlines, and physical work environment of an organization (Shalley & Zhou, 2003).

In the long run, study of professionals working on project teams found that effective reactions characterized by satisfaction were positively associated with creativity (Staw, 1995). Creativity viewed as the key to successful implementation of creative ideas and also an important tool for the effectiveness of all kinds of projects in the organizations in short and long run (Oldham & Cummings, 1996).

Hence,

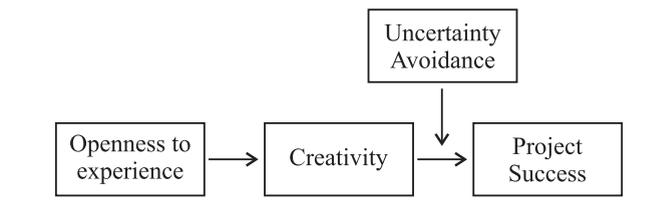
*Hypothesis 4. Creativity mediates the positive relationship between openness to experience and project success*

### Moderating role of uncertainty avoidance

Hofstede defined uncertainty avoidance as "the extent to which members of culture feel threatened by uncertain or unknown situations (Hofstede, 1991). The study identified uncertainty avoidance value varies across cultures. Uncertainty avoidance has been treated at collective cultural level (Albers-Miller & Gelb, 1996), and as well as at an individual level as a personality trait (Singelis, 1994). Uncertainty avoidance builds the personality trait similar to tolerance to ambiguity in an organization. Employees try to avoid uncertainty in projects and those who score high on uncertainty avoidance are more likely to rely on decisions of the organization for project success (Triandis, 1995). Low uncertainty avoidance positively relates the creativity and project success and also advocates the higher level authorities. Hofstede suggested that collecting ideas in low uncertainty avoidance companies and then refining them into high uncertainty avoidance companies is characterized by accuracy and punctuality (Hofstede, 2001).

*Hypothesis 5. Uncertainty avoidance positively moderates the relationship between creativity and project success.*

## THEORETICAL FRAMEWORK



## RESEARCH METHODOLOGY

The purpose of this study is to examine the impact of openness to experience on project success with a mediating variable of creativity and moderating effect of uncertainty avoidance. It is a cross-sectional study with data collected using questionnaire method. Unit of analysis is individual. The target population in this study is employees in the project based organizations in the twin cities of Rawalpindi and Islamabad. For the purpose of drawing sample, convenient sampling technique was used due to the time and budget constraints. The sample for this research consists of employees from the project based organizations of Rawalpindi and Islamabad. A total of 110 self-administered questionnaires were floated in different organizations, 100 questionnaires were received back which were completed and could be utilized for the analysis purpose. The response rate came out to be 90%. Respondents were assured of the data confidentiality and the interference of the researcher was minimum.

The responses indicated that 40% of the total respondents were male while the remaining 60% were female. 34% of the total respondents lied under the age group of 25-35, 54% in the age group of 35-45, 12% in the age group of 45-55. Education wise distribution of respondents showed that 2% of the total respondents were having the intermediate degree, 16% were having the graduation degree and the remaining 41% were having the master's degree and 32% were having Ms/MPhil degree and 9% were having PhD degree.

### Instrumentations

Questionnaires used for the data collections were adopted from the previous researches. Questions were measured on a 5 point Likert scale where 1 = strongly disagree, 2 = disagree, 3 = Neutral, 4 = agree and 5 = strongly agree.

### Openness to experience

For openness to experience the scale used was

adopted from Mowen, John C and Nancy Spears (1999). Scale consisted of 5 items, with the Cronbach's Alpha at 0.702, validating the reliability of the scale.

**Project success**

In order to measure project success a 9-item scale was used by Belout, A., & Gauvreau, C. (2004). The Cronbach's alpha value of the scale was measured at 0.683.

**Creativity**

The scale used to measure creativity was adopted from Zhou, J., & Oldham, G. R. (2001). It consisted of 13 items, with Cronbach's alpha at 0.861.

**Uncertainty avoidance**

Uncertainty avoidance was measured using a 4-item scale, by Rai, Arun, Likoebe M. Maruping, and Viswanath Venkatesh (2009). The Cronbach's alpha = 0.672.

**RESULTS**

The results and findings of this research study are discussed below. Analysis includes correlation and regression analysis. Hierarchical regression was also conducted to determine the impact of moderation and mediation.

**TABLE 1**  
**Correlation Analysis**

Variables	1	2	3	4
Openness to experience	1			
Creativity	.529**	1		
Project success	.269**	.532**	1	
Uncertainty avoidance	.283**	.270**	.426**	1

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

Correlation analysis shows the relationship between variables openness to experience, creativity, uncertainty avoidance and Project Success. The correlation between openness to experience and creativity is 0.529\*\*, which indicates significant and positive correlation between both variables. The correlation between openness to experience and creativity is 0.269\*\*, which means there is positive correlation between both variables. Similarly, project success and creativity are also positively correlated at 0.532\*\*. Uncertainty avoidance and openness to experience are correlated at 0.283\*\*, which

shows positive correlation between the variables. The correlation between uncertainty avoidance and creativity is 0.207\*\*, which ascertains a positive correlation between both variables; as well as the correlation between uncertainty avoidance and project success at 0.426\*\*.

**TABLE 2**  
**Hierarchical Regression Analysis**

Predictor	Outcome Project Success		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step I			
Control Variables	.125	.132	.132**
Step II			
Creativity	.527	.387	.255**
Step III			
Openness to experience	.017	.387	.000

a. Predictors: (Constant), Education, Gender, Age  
 b. Predictors: (Constant), Education, Gender, Age, C\_Mean  
 c. Predictors: (Constant), Education, Gender, Age, C\_Mean, OE\_Mean

Table (2) shows the results of the mediated regression analysis. The results indicate that although the direct relationship between openness to experience and project success is not significant, by incorporating the mediator, i.e. creativity, the change in R<sup>2</sup> occurs at 0.255\*\*, which is significant, thus indicating that creativity mediates the relationship between openness to experience and project success, leading to the acceptance of hypothesis 4.

**TABLE 3**  
**Results of Hierarchical Moderated Regression Analysis**

Predictor	Outcome Project Success		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step I			
Control Variables	.125	.132	.132**
Step II			
Openness to experience	.185**	.284	.152**
Uncertainty avoidance	.321**	-	-
Step III			
OExUA	.969	.295	.011

a. Predictors:(Constant),Education, Gender, Age  
 b. Predictors:(Constant),Education, Gender, Age, UA\_Mean, OE\_Mean  
 c. Predictors:(Constant),Education, Gender, Age, UA\_Mean, OE\_Mean, OExUA

Table (3) shows the results of the moderated regression analysis. The results of the analysis indicate that after incorporating the interaction term, i.e. creativity\*uncertainty avoidance, the change in R<sup>2</sup> is insignificant, at 0.011. Therefore, as per the findings, uncertainty avoidance does not positively moderate the relationship between creativity and project success, leading to the rejection of hypothesis 5.

## DISCUSSION

Findings of the current study are in line with the previous literature that Openness to experience predicts creative outcomes and creative processes and likewise, openness to experience is positively associated to project performance in problem solving producing creative ideas (Leung, Maddux, Galinsky & Chiu, 2008). People scoring high on openness to experience have access to variety of experiences and perspectives therefore it results in creativity in project performance (McCrae & Costa, 1997). The results of the current study concur that openness to experience is positively associated with the creativity. Therefore, leading to the acceptance of hypothesis one. Reasons for accepting the H1 according to study are that if employees score high on openness to experience they will be more creative and organizations use creativity of employees to enhance the employee performance, which results in project success. Exploration of ideas is connected with increasing variance, experimentation, searching for alternatives and it is important for organizational learning as well as for the better outcome of project in form of success (March, 1991). Creativity makes employees learn about the fundamental values, identity and motives or goals of the projects (Avolio and Gardner, 2005). Hypothesis two tested that creativity is positively associated with project success, and was accepted, which aligns with the previous studies and the reasons being that exploration of new ideas will help the employee to more creatively enhance their performance to achieve the project goals and objectives which leads to project success. Furthermore, rest of the results are also in line with previous literature, Openness to experience has higher connection with project success and its creative achievement for the organization and it also tend to individual differences (Carson, Peterson, & Higgins, 2005). People who score high on openness to experience are more explorative and have divergent thinking which helps employees to use more creative ideas and outcomes in form of project success (DeYoung, Peterson, & Higgins, 2005; McCrae, 1987). Openness to experience produces creative processes that increase the organization flexibility and predicts the capacity of individual creativity.

Additionally, creativity makes employees more

flexible, they willingly take risks. Openness to experience reduces complexity, which resultantly expands their access to ideas and potential solution for their project success (Gagne' & Deci, 2005). Mediation hypothesis proposed that creativity mediates the relationship between openness to experience and project success. The results lead to the acceptance of the hypothesis, as supported by the existing literature. As previously established, creativity is viewed as the key to successful implementation of creative ideas by people, who are open to new experiences, thus ultimately leading to the project success (Oldham & Cummings, 1996). Moderation hypothesis was developed to explore that whether uncertainty avoidance moderates the relationship between creativity and project success or not, i.e. does it strengthens the relationship or not. The rejection of moderation can be justified using context as the base. Pakistan being a predominately uncertainty avoidance culture, at an individual as well as organizational level, may not necessarily mean that it will lead to project success. Employees using creative means, although leading to project success, may take risks by using new methods and new ideas to ensure project success; therefore, rendering to the rejection of moderation hypothesis.

## Limitations

The study like any other attempt as research has certain limitations. The relatively small sample size of just 100 poses as one of the biggest limitation, hampering the generalizability of the findings, across the region. Collecting data from across the country with a larger sample size would not only help overcome the aforesaid limitation, it would provide a clearer and a bigger picture as well.

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# **IMPACT OF ETHICAL LEADERSHIP ON EMPLOYEE CREATIVITY: MEDIATING ROLE OF TRUST AND MODERATING ROLE OF CREATIVE SELF EFFICACY**

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## **ABSTRACT**

**The current study evaluated the impact of ethical leadership on employee creativity, with the mediating role of trust in leadership, while taking creative self efficacy as the moderator between trust and creativity. The data were collected from the 126 employees working in private sector organizations from Rawalpindi Islamabad region. The findings of the study indicated that ethical leadership is positively and significantly associated with the employee creativity as well as trust; whereas, trust in leadership partially mediates the relationship between the two. Similarly, the results confirmed that creative self-efficacy positively moderates the relationship between trust in leadership and employee creativity. Study implications and recommendations are also discussed.**

## **INTRODUCTION**

Creativity and Innovation in the workplace have become increasingly important determinants of organizational performance, success and longer-term survival. As organizations seek to harness the ideas and suggestions of their employees, it is axiomatic that the process of idea generation and implementation has become a source of distinct competitive advantage (Anderson, De Dreu, & Nijstad, 2004; West, 2002a; Zhou & Shalley, 2003). Creativity and innovation are complex, multi-level, and emergent phenomena that pan out over time and that require skillful leadership in order to maximize the benefits of new and improved ways of employees working (Anderson, Potočnik, & Zhou, 2014). Ethical leadership is a process through which ethical leader behavior is transferred to followers' behavior through the common methods of social learning, exchange and identity (Treviño, Brown & Hartman, 2003; Walumbwa, Morrison & Christensen, 2012).

Ethical leadership is extremely important where team member communications need trust, fairness and empowering behavior (Den Hartog & De Hoogh, 2009). When team members develop trust in their leaders, they are more enthusiastic to follow ethical procedures and face threats (Hoyt, Price & Poatsy, 2013). Alternatively, if followers think their leaders to be unethical, they are more likely to be under pressure and depression and feel anxiety in the workplace, and to exhibit counterproductive behavior such as deceitful means during problem-solving tasks, which results

in reduced performance and outcomes (Ariely, 2012; Detert, Treviño, Burris & Andiappan, 2007; Gino & Ariely, 2012; Hoyt et al., 2013).

Few studies have paid attention to the impact of ethical leadership on employees' creativity, despite the fact that leadership is one of the most influential predictors of employee creativity (Atwater & Carmeli, 2009; Volmer, Spurk & Niessen, 2012). A recent study also showed the positive relationship between ethical leadership and employee's creativity (Chen, & Hou, 2016). Many scholars consider trust a core basis of effective leadership (e.g., Fairholm, 1994; Zand, 1997). One of the current trends in leadership research is the emphasis on the inspirational aspects of leaders, and those leadership theories such as transformational leadership and charismatic leadership treat trust as an important attribute for effective leadership (Kirkpatrick & Locke, 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). In line with this, the need to explore the mediating mechanism of trust between ethical leadership and employee leadership seems imperative.

The extent of an individuals' ability to provide creative results for an organization is known as creative self efficacy (Tierney & Farmer, 2002). When a person has an internal belief that he/she can confidently perform with superior creativity, it reflects a high rank of creative self efficacy (Tierney & Farmer, 2011). Some researchers have also stated that when employees are occupied by creative activities, a high rank of self-efficacy can help them find solutions to a problem (Gist & Mitchell, 1992). In a study of undergraduate students,

Choi (2004) revealed that transformational leadership establishes a direct connection between creative self efficacy, creative performance and employee creativity. Transformational leaders take proactive steps towards coming up with creative thoughts and they expect the same from their employees. As a result, leaders who implement a transformational leadership style could encourage their employees' creativity through creative self-efficacy (CSE) (Dvir et al., 2002; Bass and Avolio, 1990).

Bandura (1997) also considered self-efficacy as an essential situation for creative productivity and the creation of "new knowledge." As self-efficacy views effect the inspiration and ability to engage in specific behavior (Bandura, 1977), as well as the quest of specific tasks (Bandura, 1986). The concept of self-efficacy assures much for understanding creative action in organizational settings. In fact, Ford (1996) placed self-efficacy values as a key motivational component in his model of individual creative action. Despite the potential link of self-efficacy to creativity, little attention has been directed toward the concept in a creativity context (Tierney & Farmer, 2002). Ethical leadership is a kind of transformational leadership; hence it can be proposed that CSE has a moderating role between trust in leadership and employees' creativity.

The present research is intended to contribute to the existing literature in several ways. First, the study seeks to fill the knowledge gap concerning the link between ethical leadership and creativity. Previous research has demonstrated that leadership is one of the most influential factors affecting employee creativity. Second, determining how trust in leadership helps employees perform more effectively and creatively. The present study uses social learning theory as the core theoretical focus and takes a step further to identify the mediating effect of trust in regard to the leadership-creativity link. The paper aims to study the link between ethical leadership and creativity through trust in leadership, while the link between trust in leadership and creativity is moderated by creative self-efficacy. Existing literature considerably lacks sufficient research in this regard, hence, the aim is provide some considerable input.

## REVIEW OF LITERATURE

### Ethical Leadership

Ethics and integrity have been receiving an increasing amount of attention in the leadership field for the last few years (Kalshoven, Den Hartog & De Hoogh, 2011). The ethical leadership aspects in corporate supervisors are as follow: care, trustworthiness, honesty and fairness. That is, behavior that clearly demonstrates

ethical conduct, as well as fair and principled decisions, thereby communicating the importance of ethics to followers, rewarding positive ethical behavior and disciplining those who exhibit unethical behavior (Jordan, Brown, Treviño & Finkelstein, 2013). It is primarily through their actions that ethical leaders are able to influence the behavior of their followers. Indeed, according to the definition of ethical leadership proposed by Brown et al. (2005), the behavior of ethical leaders stimulates the ethical behavior of subordinates through communication and support. It is defined as "the exhibition of normatively suitable conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision making" (Brown et al., 2005, p. 120). Ethical leaders try to convert the behavior of their subordinates by communicating ethical standards, establishing ethical behavioral models and controlling the ethical behavior of subordinates (Brown & Treviño, 2006; Treviño et al., 2003).

### Ethical Leadership and Trust in Leadership

In an organization, an environment that enables cooperation, helps to manage differences, encourages information sharing, and increases honesty and common acceptance uses trust as a key component of successful working relationships between leaders and followers (Argyris, 1970; Den Hartog, 2003; Deutsch, 1973; Dirks & Ferrin, 2002; Lane, 1998; Mayer et al., 1995; Shapiro, 1987; Tsai & Ghoshal, 1998; Whitener, Brodt, Korsgaard, & Werner, 1998; Zand, 1972, 1997; Zucker, 1986). Trust is defined as an emotional state including the positive expectation that another party will carry out particular actions that are important to one, coupled with a keenness to accept susceptibility which may arise from the actions of that other party (e.g., Lane, 1998; Mayer et al., 1995; Rousseau, Sitkin, Burt, & Camerer, 1998).

There is little unambiguous attention to the ethical and moral dimensions of trust in the organizational literature, separately from the widely accepted idea that the integrity of an individual (e.g., a leader) is an important dimension of that individual's trustworthiness (Mayer et al., 1995; Brower et al., 2000; Dietz & Den Hartog, 2006; Lewicki, et al., 2006). Integrity is defined as the trustee's devotion to a set of relevant values, norms and principles that is suitable to the trustor (Mayer et al., 1995). The other two dimensions of the trustee's trustworthiness, as perceived by the trustor, are ability and benevolence (Mayer et al., 1995). Ability is defined as the capability of the trustee to achieve what is expected of him or her, and benevolence concerns the degree to which the trustee is perceived to want to

do good to the trustor, aside from an egocentric income reason (Mayer et al. p. 718). Hosmer (1995) proposed a different definition of trust, where trust is the hope by one person, group, or firm of ethically justifiable behavior that is morally correct decision and action based upon ethical principles of analysis on the part of the other person, group, or firm in a joint endeavor or economic trade (p. 399). This definition refers directly to ethically reasonable behavior, but it is not widely used.

There is much research on trust in leaders (Den Hartog, 2003; Lewicki, 2006; De Hoogh & Den Hartog, 2008; Dirks & Ferrin, 2002; Lapidot, 2007). With regard to followers' trust in their leader, the results to date propose that integrity (together with ability) is especially important in cases of trust erosion compared to cases of trust building, where benevolence is the most important dimension of trustworthiness (Lapidot, 2007). Dirks and Ferrin (2002) found that the most important antecedents for trust in leaders are leadership style and practices, in particular transformational leadership, perceived organizational support, and interactional justice. They also suggested that role-modeling behavior may be responsible for the effects of transformational leadership. Craig and Gustafson (1998) posited that ethical integrity is an important aspect of leadership more generally.

There is not much research on how the moral and ethical dimensions of leadership impact trust. Podsakoff, MacKenzie, Moorman, and Fetter (1990), however, found that transformational leadership—a leadership style that is often said to be closely related to ethical leadership (Bass & Steidlmeier, 1999; Brown & Treviño, 2006; Lasthuizen, 2008) has a direct effect on followers' trust in their leader, which suggests an implicit relationship between ethical leadership and trust. Furthermore, in her research concerning the relationships between leadership and trust, Den Hartog (2003) found a strong correlation between perceived leader integrity and trust in leader. Caldwell et al. (2008) also conceptually related ethical stewardship to increased levels of trust, but without any empirical examination or testing. Finally, the trustworthiness of the leader is often seen as a prerequisite for setting a good example as an ethical leader (Treviño et al., 2000; Treviño & Weaver, 2003).

In this study, it is aimed to explicitly investigate the relationship between ethical leadership behaviors and trust. In line with the view of Mayer et al. (1995), dominant trust model, in which integrity is a precursor to trust, it is hypothesized that ethical leadership positively influence trust. Therefore the question becomes, which leadership behaviors demonstrate integrity to followers? In the preceding paragraphs, we have argued that Treviño et al.'s (2000) pillars of ethical leadership are the relevant behaviors that leaders can employ to demonstrate their

integrity and that these behaviors are thus important antecedents to trust. More specifically, we expect that the behavioral expressions of the three pillars of ethical leadership (role-modeling through visible action, the use of rewards and discipline, and communicating about ethics and values), as observed by followers, increase the level of trust that those followers have in their leader.

*Hypothesis 1. Ethical leadership is positively related to employees' trust in leadership.*

## **Ethical Leadership, Trust in Leadership and Creativity**

Ethical leadership is defined by Brown et al. (2005) "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision making" (p. 120). Ethical leaders are described by traits such as integrity, honesty, caring, altruism, openness, collective motivation, trustworthiness, justice and by their behavior as principled individuals who make fair decisions (Brown et al., 2005; Brown & Treviño, 2006).

Tu and Lu (2012) found that ethical leadership is positively related to employee creativity through two mechanisms: cognition and motivation. A characteristic of the cognitive mechanism is that followers are more likely to pay attention to work significance and form new ideas or ways to gain organizational goals, when leaders who are ethical underline how important the work of these employees is to other employees, to their group members, and to the organization (Brown & Treviño, 2006; Tu & Lu, 2012). When ethical leaders show organizational commitment (De Hoogh & Den Hartog, 2008), employees are more likely to feel psychologically safe enough to speak out with new ideas (Tu & Lu, 2012). Furthermore, ethical leaders listen to employees and encourage them to express their opinions and concerns through two-way open communication, thereby engendering greater trust (Brown et al., 2005). This open communication will, in turn, persuade the followers to use their imagination to generate novel ideas in order to improve on going work procedures and processes (Tu & Lu, 2012).

The motivational mechanism is related to the respect that ethical leaders have for the dignity, human nature, and developmental needs of their followers, which enables the followers to acquire work-related knowledge and to learn new skills (Zhu, May, & Avolio, 2004). As a result of this respect shown by the leader, followers will have greater self-efficacy, which is evidence of their heightened intrinsic motivation (Amabile, Conti, Coon,

Lazenby, & Herron, 1996). Consequently, they are more likely to behave creatively. Employees' intrinsic motivation is also heightened when they have a high level of autonomy in their work situation, which provides them with enhanced independence, freedom, and discretion to schedule work (Brown et al., 2005; Piccolo, Greenbaum, den Hartog, & Folger, 2010). Intrinsically motivated individuals are more likely to expend a high level of effort on their work, with less constraint, leading to greater creativity (Tu & Lu, 2012).

*Hypothesis 2. Ethical leadership is positively related to employee creativity.*

The research intends to study and establish that ethical leadership would facilitate trust in leadership, which, in turn, would nurture employee creativity. Leaders in an organization can develop a process to help overcome resistance to knowledge sharing, and build up a context of cooperation (Carmeli et al., 2013). Ethical leaders help to build, maintain, and facilitate a context in which the followers interact and create new meanings, and in which leaders and followers will form a trusting and cooperative relationship (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). In this environment followers concentrate more on cooperation and communication, and become more motivated. This is vital for both the creation of knowledge and knowledge sharing (Avey et al., 2012; Carmeli et al., 2013; Wang & Noe, 2010), a process that, in turn, cultivates employee creativity. Therefore, the following hypotheses are thus developed:

*Hypothesis 3. Trust in leadership is positively related to individual's creativity.*

*Hypothesis 4. The positive relationship between ethical leadership and employee creativity is mediated by trust in leadership.*

### The Moderating Role of Creative Self Efficacy

A creativity-focused sense of efficacy should be conducive to creativity because it can offset obstacles inherent to creative engagement. First, creativity requires trial-and-error experimentation and the willingness to learn from such efforts. Previous researches (Stevens & Gist, 1997) suggested that self-efficacy can assist acceptance of a mastery goal orientation (Elliott & Dweck, 1988; Beghetto, 2006, 2007), contributing to the use of meta-cognitive or self-regulative learning strategies linked to creative activity (Nickerson, 1999). Furthermore, domain-specific efficacy beliefs can lead to later experiences of work-

related flow (Csikszentmihalyi, 1996), an affective state that is closely tied to creative idea generation (Csikszentmihalyi & LeFevre, 1989). In addition, because novel tasks elicit active appraisals of task requirements (Bandura, 1997), individuals following creative outcomes should be cognizant of, and attempt to account for, likely challenges encountered and should not be discouraged when they feel efficacious (Bandura, 1986).

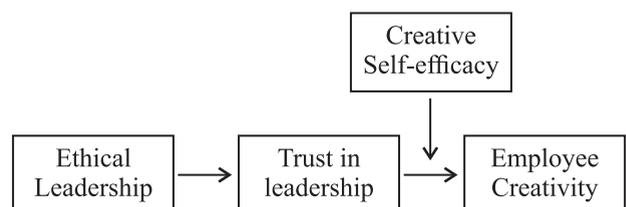
Literature (Barron & Harrington, 1981; Petkus, 1996) also proposes a high level of confidence; what Bandura (1997) referred to as "invincible self-efficacy" (p. 73) is an attribute of highly successful creators. Additionally, previous studies have found creative self-efficacy to be linked to both creative performance (Choi, 2004; Gong et al., 2009; Jaussi et al., 2007; Shin & Zhou, 2007; Tierney & Farmer, 2002, 2004) and creativity work involvement (Carmeli & Schaubroeck, 2007) in employees. Thus, both theoretical and experiential support suggests that as creative efficacy beliefs develop, so should events of creative performance.

From a causality viewpoint, the substantive area of experimental and longitudinal research gives convincing evidence that self-efficacy compels behavioral functioning and performance (Bandura & Locke, 2003). Bandura (1997) noted, however, that in examining relations between self-efficacy and performance outcomes in actual task settings, it is vital to study them as they operate concurrently or in close temporal proximity to one another.

He emphasized that current efficacy views have their most salient and strong effects on current activity and that close timing between efficacy and performance measurement will result in a more accurate assessment of the true effects of an individual's self-efficacy beliefs. Empirical studies have tended to support the idea that immediately preceding self-efficacy has greater impacts on performance than does earlier self-efficacy (Shea & Howell, 2000). Therefore, hypothesis 5 is developed as:

*Hypothesis 5. Creative self efficacy positively moderates the relationship between trust in leadership and employee creativity*

### THEORETICAL FRAMEWORK



## RESEARCH METHODOLOGY

The present study is a cross sectional study. The data were collected from production departments of different private organizations, in Rawalpindi/Islamabad. Convenient sampling techniques were used in order to draw the sample, due to the budget and time constraints. Data was collected using questionnaire method. Self-administered questionnaires were distributed among 170 employees, out of whom 138 were returned and 126 were usable. The response rate was 74%. Demographic variables, i.e. age, gender, education and organizational experience were controlled, while running regression tests.

The sample includes, 47.6% (n = 60) males and 52.4% (n = 66) females. Sample was a blend of different age groups as 52.4% (n = 66) were 18-25 years old, 41.3 % (n = 52), were between the age of 26-33 years, 4.8% (n = 6), were between the age of 34-41 years and 1.6% (n = 02) were between the age of 42-49 years. The sample included participants with qualifications; Bachelor 4.8% (n = 6), Masters 19% (n = 24) and MS/PhD 76.2% (n = 96). Furthermore the sample includes the respondents having experience, 1-5 years 81% (n = 102), 6-10 years 12.7% (n = 16), 11-15 years 3.2% (n=4) and 16-20 years 3.2% (n=4).

## INSTRUMENTS

### Ethical Leadership

EL was reported by the employees, using 10-items (ELS) scale developed by (Brown et al., 2005). Item examples include “My leader listens to what employees have to say.”, “My leader can be trusted.” and “My leader discusses business ethics or values with employee.” The scale used for measurement was ‘Likert’ scale which was ranging from 1 (strongly disagree) to 5 (strongly agree). The estimated reliability was .89.

### Trust in Leadership

Trust in leadership was reported by the employees, using 6-items scale developed by (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Item examples include “I feel

quite confident that my leader will always try to treat me fairly.”, “I feel a strong loyalty to my leader.” and “I have a strong sense of loyalty toward my leader.” The scale used for measurement was ‘Likert’ scale which was ranging from 1 (strongly disagree) to 5 (strongly agree). The estimated reliability was .79.

### Creative Self Efficacy

Creative self efficacy was reported by the employees, using 3-items scale developed by (Tierney, & Farmer, 2002). Item examples include “I have confidence in my ability to solve problems creatively.”, “I feel that I am good at generating novel ideas.” and “I have a knack for further developing the ideas of others.” The scale used for measurement was ‘Likert’ scale which was ranging from 1 (strongly disagree) to 5 (strongly agree). The estimated reliability was .79.

### Employees Creativity

Employees creativity was reported by the employees, using 13-items scale developed by (Zhou, & George, 2001)). Item examples include “Suggests new ways to achieve goals or objectives.”, “Promotes and champions ideas to others.” and “Exhibits creativity on the job when given the opportunity to.” The scale used for measurement was ‘Likert’ scale which was ranging from 1 (strongly disagree) to 5 (strongly agree). The estimated reliability was .88.

## RESULTS

The descriptive statistics and correlations among the variables are reported in Table 1.

Ethical leadership has been entered as independent variable, to test the first hypothesis that ethical leadership is positively related to Employee Creativity. Table (1) indicates that ethical leadership is significantly and positively correlated to employee creativity. Similarly, ethical leadership is positively and significantly related to trust in leadership; I found that managerial ethical leadership is positively and significantly correlated to trust in leadership. Trust in leadership is positively and significantly related to employee creativity;

**TABLE 1**  
**Descriptive Statistics and Correlations**

	Mean	SD	1	2	3	4
1 Ethical leadership	3.5429	.80949	1			
2 Trust in leadership	3.4788	.70773	.623**	1		
3 Creative self efficacy	3.6931	.87494	.522**	.422**	1	
4 Employee creativity	3.7521	.59829	.505**	.605**	.522**	1

**TABLE 2**  
**Regressions Analysis**

Predicator	Trust in leadership			Employee Creativity		
	$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1						
Control Variables		.05			.23	
Step2						
Ethical leadership	.54***	.42	.40	.35***	.46	.43
Trust in leadership				.46***	.51	.49

\*\* $P < .05$ , \*\*\* $P < .001$

I found that trust in leadership is positively and significantly related to employee creativity.

Table (2) shows results of regression analysis for outcomes. In order to run mediation using Baron and Kenny method, three conditions need to be met. The regression analysis table indicates the three conditions being met, i.e. the direct relationship between ethical leadership and trust is significant at  $\beta = 0.54***$  as well as between trust and creativity with  $\beta = 0.46***$ . Similarly, table indicates a significant direct relationship between ethical leadership and creativity at  $\beta = 0.35***$ . Therefore, mediation regression tests could be run, using Baron and Kenny method.

The mediation analysis shows that although the relationship between ethical leadership and employee creativity is significant when trust is incorporated as a mediator, the direct relation between the two shows stronger significance, indicating that trust partially mediates the relationship between ethical leadership and creativity, leading to the acceptance of hypothesis 4.

Table (4) shows the moderated regression analysis tests. The results found indicate that creative self efficacy does not moderate the relationship between trust and creativity, as the  $\beta$  value is not significant at 0.02.

## DISCUSSION AND CONCLUSION

This study was meant to investigate the positive relationship between ethical leadership and employee creativity with the mediating mechanism of trust in leadership through which ethical leadership influences the employee creativity. The combined effect of creative self efficacy and trust in leadership on employee creativity was also proposed. It was found through empirical evidence that ethical leadership has positive effect on employee creativity which is aligned with previous study (Chen, & Hou, 2016). When subordinates perceived exceptional ethical behavior among their leaders, their creativity was enhanced through social learning (Chen, & Hou, 2016). The trust in leadership mediates the relationship between ethical leadership and employee creativity. According to Brown et al. (2005), ethical leadership is positively related to affective trust in the leader.

Contrary to our prediction, creative self efficacy does not moderate the relationship between trust in leadership and employee creativity. This might be due to high power distance in Pakistan (Hosftede, 1984). In high power distance culture, individuals believe that their creative ideas will not be accepted, which ultimately leads to low intrinsic motivation. Creative self-efficacy reflects knowledge and skills as well as intrinsic motivation to be creative (Gong et al., 2009), which is low in Pakistan. Employee intrinsic motivation is also focused on motivation based on interest and enjoyment (Shin & Zhou, 2003). Moreover, individual

**TABLE 3**  
**Mediated Regression Analysis**

Predicator	Employee Creativity		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control Variables		.018	
Step2			
Ethical leadership (without controlling mediator)	.35***	.46	.43
Step 3			
Ethical leadership (with controlling mediator)	.17**	.55	.52

\*\* $P < .05$ , \*\*\* $P < .001$

**TABLE 4**  
**Moderated Regression Analysis**

Predicator	Employee Creativity		
	$\beta$	R <sup>2</sup>	$\Delta R^2$
Step 1			
Control Variables		0.24	
Step2			
Creative Self efficacy	0.20***	.57	.55
Step 3			
Trust in leadership x Creative Self efficacy	.02	.58	.55

\*\* $P < .05$ , \*\*\* $P < .001$

from a tight culture might also experience low creative self-efficacy — the confidence that one has the skill to generate creative outcomes (Tierney & Farmer, 2002). The other reason is the collectivistic culture prevailing in Pakistan. In collectivistic cultures the evaluation by in-group members must be the most essential origin of efficacy information (Oettingen, 1995). Due to above mentioned reasons creative self efficacy neither strengthen nor weaken the relationship between trust in leadership and employee creativity.

This study empirically establishes that ethical leadership increases the employee creativity through mediating mechanism of trust in leadership. This study identified an important mediating mechanism which was previously not examined. The current examination answers that how ethical leadership causes trust in leadership which leads to enhanced employee creativity. It also examined that creative self efficacy does not moderate the relationship between trust in leadership and employee creativity.

### Implications

The study has certain implications, theoretically as well as practically. It not only enriches the existing literature of leadership by providing empirical proves, the research can be useful practically, within organizations in understanding the role the leadership play in employee creativity, through focusing on building the trust in leadership, in order to enhance the employee performance, and ultimately organizational performance.

### Recommendations

The current study has identified very important mediating mechanism i.e. trust in leadership between the association of ethical leadership and employee creativity. Yet further empirical research is required to identify more mediating variables between ethical leadership and employee creativity. The focus of the study was three Pakistani organizations that is a collectivist society with greater power distance. The scope of the investigation should be extended to other manufacturing industries for generalization of the findings. Moreover cross cultural analysis to the individualist societies would also increase the generalization of the results.

### Limitations

The current study offered some useful theoretical as well as practical implications but isn't without some limitations also which can be addressed in future empirical research. Small sample size can be one of the

biggest hurdles in the way of the generalization of the empirical proven findings of the current study. Data were not collected in time lags, due to time constraints. Collecting data in time lags, may help get clearer picture. Similarly, results are based on data collected from the Rawalpindi Islamabad region, which again hampers the generalization of the study results.

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