

## Impact of Product Mix and Corporate Governance Practices on Earnings Volatility-Evidence from Banking Sector of Pakistan

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### Abstract

The study examines the relationship between product mix and corporate governance on earnings volatility with the help of degree of total leverage (DTL) model. The present study attempts to fill the gap by investigating the relationship between product mix and corporate governance on earnings volatility for developing financial market during the period of 2005-2015. Earnings volatility is analysed by two proxies' .i.e. revenue volatility and degree of total leverage. This study has used mainly two types of product mix that consists of lending and fee-based activities while board size, board independence and CEO power is used to measure corporate governance. The results of the study signify the adverse impact of fee-based activities on earnings volatility in the banking sector of Pakistan. Corporate governance confirms the board size and power of CEO in the board as contributing factors to control earnings volatility. The findings are useful to the bankers and regulators to comprehend the role of diversification and corporate governance in creating value and reducing risk for the stakeholders.

**Keywords:** Corporate Governance, Degree of total leverage, Diversification, Earnings Volatility, Product Mix

### 1. Introduction

Banking sector acts as “lifeblood” of an economy and is considered to be the most significant in any country. The earnings of the banks are achieved due to the activities of lending, investment, trading, deposits etc. The core business of any bank is lending. Due to the technological changes, banks are capable of introducing new functions and diversify its products. For that purpose, banks need to introduce that product mix that will result into more profitability and less risks. Bankers tried to increase their earnings

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and the increased competition in credit activities between banks exerts banks to shift to new strategies of looking for non-interest income. This shift in product mix activities leads to benefit in developed societies while case is still uncovered for developing countries. The results of different income structures on the risk-return profile of banks are quite unclear (Busch & Kick, 2015). In developing countries, non-interest income expanded faster than interest income because fee-based activities are least reactive regarding fluctuations in rate of interest and deterioration of the economy. Banks are exploiting the opportunities to diversify in fee-based activities to gain more earnings Nguyen and Vo (2015).

The governance of financial institution has been a hot and debatable topic because of the crisis of 2008 (Vallascas & Hagendorff, 2013), while the apprehension about the catastrophic role of corporate governance is studied with regards to performance in the banking industry (Kirkpatrick, 2009). As diversification improves bank's performance, therefore corporate governance does the same purpose to improve the overall performance of banking sector. This means that banks' governance performs a paramount responsibility owing to the distinction in the product mix. Good governance leads to an efficient execution of governance while prohibiting the arrogation of directing owners along with the guarantee of prudent decision-making (Ali Shah, Butt, & Hassan, 2009).

Altering the products of banks can alter the basic mechanism in failure of commercial banks in Pakistan. The main reason behind the failure of banks related to the write offs of loans that are not paid back. Moreover, the decrease in the profits from any of the activities of banks guides the bank to use retained earnings for its capital accumulation. The change of activities from traditional loan to fee-based can also contribute in the failure of banks. The effect of over diversification leads to the failure of banks because it increases the volatility in banking system due to increase in the fixed expenditure DeYoung and Roland (2001).

The Banking sector of Pakistan shows progress in terms of profit after tax in 2015 is PKR 199 billion against the last year profit of PKR 163 billion because of increase in lending and investment in government securities which resulted in the 16.8% growth in the asset base of the banking industry. The total lending activities of all the banks increased from PKR 919 billion to PKR 981 billion in 2015. The non-mark-up/ fee-based income also increases from PKR 167 billion to PKR 108 billion SBP Quarterly Performance Review (2016).

Current study also aims to understand the role of directors (i.e. inside members on board) under Stewardship theory Donaldson and Davis (1994) and focuses on the association among board independence and the performance of the bank under Agency theory Fama and Jensen (1983). For corporate governance, mostly the board members meet 5 to 8 times during a year depending upon the requirement of each bank in

Pakistan. The code recommended that the ideal size of the board ranges from 5-16 members depending upon the size of the organization and the representation of independent directors and the executive directors should not be more than 75% of the total board size Javed and Iqbal (2007).

The study aims to link the role of corporate governance in product mix and earnings volatility, because from literature it is evident that the board of directors help in improving the performance. The main focus is to investigate whether the effective corporate governance can help banks in their diversification strategy and reduction in risk and insolvency of banks. The study use panel data technique to regress the effect of product mix and corporate governance on earnings volatility. The results show the adverse impact of diversification on earnings volatility. Corporate governance shows the significant impact on earnings volatility.

### **1.1. Significance of the Study**

An important significance of the current study is to bring it in closer context of the earning volatility managed with the help of corporate governance and to check whether the diversification make any bank able to reduce the riskiness or insolvency ultimately.

The study provides policy implications for bankers whether to use diversification as a strategy to reduce earnings volatility and insolvency of banks. It provides future implications for policy makers. This study is useful for regulators i.e. State Bank of Pakistan to control the activities of banks and to keep them safe from any uncertain situation like liquidity and insolvency.

The present study adds on the previous literature by incorporating the role of corporate governance in contributing the strategies about product mix and earning volatility in the developing countries like Pakistan. This situation needed to be considered for developing countries. This study focuses on the banking sector of Pakistan to provide the fresh empirical evidence for the developing countries.

## **2. Theoretical Foundation**

The theoretical underpinning of the study is based on the literature of product mix, corporate governance, and earning volatility, which helps to understand the background and foundation of the topic.

### **2.1. Degree of Total Leverage Model**

A company which has a higher ratio of the fixed-to-variable expenses is considered to have a greater “degree of leverage.” This phenomenon has summarized the association among the upper and lower figures in the income statement of a company. When the sales proceeds are excessive in an “extremely levered” firm, then the proportionate increase will be shown by the profits of the company because of the less variable cost

which contributed in relatively large portion of every additional revenue dollar. The degree of leverage of company could be explained more accurately as the proportion change in its profit ( $\pi$ ) induced by a 1% change in revenue ( $r$ ):

$$DTL = \frac{\delta\pi}{\delta r} * \frac{r}{\pi} = \frac{\% \Delta \pi}{\% \Delta r} \quad (a)$$

Conversely, degree of total leverage is the proportionate change in revenue of profits. Degree of total leverage is frequently demonstrated such as outcome of further two leverage convictions, the extent of operating leverage and the measure of financial dominance (namely, Degree of total leverage = Degree of operating leverage \* Degree of financial leverage). Degree of operating leverage is the proportionate of profits prior to earnings before interest and taxes regarding proceeds from sales and expresses born for productivity. Degree of financial leverage is the proportionate of earnings concerning earnings before interest and taxes to determine benefit from financial leverage. From these ideas, leverage concerning financial activities is much accustomed in field of banks. In this study, DTL is being emphasized as the diversification in product mix of banks may have an impact equally on operating and financial leverage, owing to the fact that it is difficult to actually distinguish interest expenses of banks into two leverage expenses.

While reorganizing equation (a), it may be stated that increased DTL could magnify specified weight for volatility in revenues into more volume of volatility in profits ( $\% \Delta \pi$ ):

$$\% \Delta \pi = DTL * \% \Delta r \quad (b)$$

A firm which has many products such as banks; the two changes in revenue and degree of total leverage were affected due to blend in products. Multiple activities of organizations appeared to be several output demand curves, a few of them are much inconsistent than others, and subsequently part of particular product revenue outflows is considered to be slightly high turbulent as compared to others. By considering it as an example, it might be logically anticipated that the surge of returns from amalgamation and procurement is explosive as compared to the profits flows from cover duties imposed on main investors. Thereby, bank's altogether revenue volatility could differ considerably relying on the diversity of products. Likewise, DTL in multi-activities of the company rests on the diversification of products, as every activity is not assembled to costs of fixed and variable ratios.

## 2.2. Financial Intermediation Theory

The theory of financial intermediation is founded by Akerlof (1995), Diamond (1984) and many others. Their perception of financial intermediation was the combination of institutions, tools and markets that satisfy the needs of various economic entities. The

modification of the traditional financial intermediation theory of banks was fully made by Ukrainian scientists Vishnevsky (2008) who explained the functions of banks quality, quantity and temporal transformation. This modification is the result of financial innovation, universalization, strong competition and diversification in the banking industry Zaernjuk, Kryukova, Bokareva, and Chernikova (2014).

In 70s, the theory of financial intermediation was based on transaction and information approaches. Information approach was founded by the phenomenon of asymmetry of information as explained by the creditor and borrower bank relationship. Information approach was proposed by George A. Akerlof, the leading theorists of information economy. He presented the universality of information asymmetry phenomenon, its presence at many markets Akerlof (1995).

Transaction approach is related to the phenomenon of transaction costs in economy and their impact on organization and conducting of economic and financial activity. Scholes, Benston, and Smith (1976) was the pioneer of presenting the association among financial intermediation and the transaction costs. They explained the main reason of the existence of financial intermediation was market friction and transaction costs because of the imperfection in the markets Scholes et al. (1976).

### **2.3. Agency theory**

The Agency theory is studied with line up the matters of the owners and managers (Fama (1980); Fama and Jensen (1983); Stano (1976)) and it depends upon the proposition as there is an innate clash associated with the interests of proprietors of a company and its management Fama and Jensen (1983). The agency dilemma is identified (Eisenhardt (1989); Fama (1980); Fama and Jensen (1983)), which explains that the interest of the management can be observed in benefits like perks (big offices, first class tickets, etc.) that even the profits can be sacrificed in achieving the benefits of perquisites Stano (1976). There must be some monitoring strategy that helped the shareholders to protect them from managers' interest which is also called agency cost and the monitoring mechanism protect the shareholders Fama and Jensen (1983).

The impacts of the agency theory on corporate governance (CG) research examine two key questions. i.e. how a firm's capability can be influenced by the development of the board of directors (Barnhart and Rosenstein (1998); Wagner III, Stimpert, and Fubara (1998)) and also how the leadership structure of organization (i.e., the duality of the CEO/chairman role) impacts the corporate performance of an organization Dalton, Daily, Ellstrand, and Johnson (1998).

According to the mechanism through which the board is expected to create impact on the corporate performance, the agency theory specifies that a larger proportion of independent directors will be able to monitor self-interests of the managers. Due to this monitoring, managers will not get chance to work for their self-interest that resulted into less agency cost and therefore owners will enjoy higher profits. This model is

extensively accepted in the business world and universally adopted emphasising the need for independent chairpersons to keep an eye on the actions of the board Kiel and Nicholson (2003).

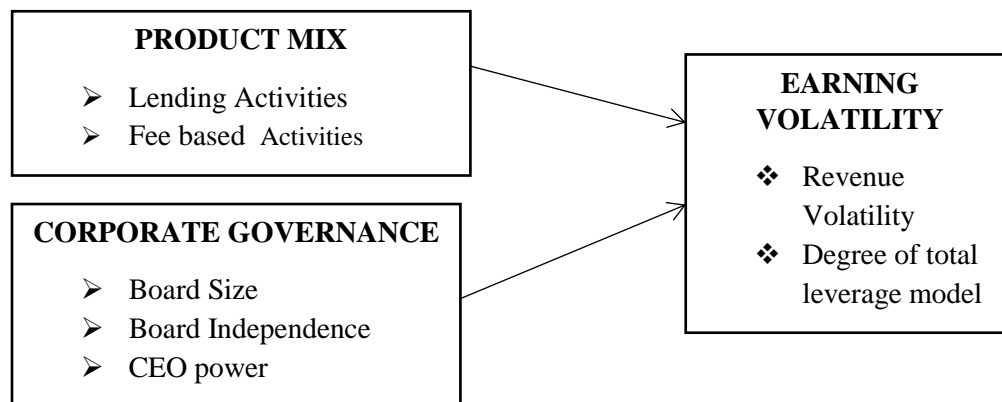
#### 2.4. Stewardship theory

Stewardship theory assumes that the managers of an organization are unavoidably reliable human beings and so they are very good guardians of the wealth which endowed to them (Donaldson (1990); Donaldson and Davis (1994)). All of the above, the inside directors pass their working lifestyle in the organization which they regulate; they can comprehend the business more as compared to any outside member of the organization and therefore can formulate better decisions (Donaldson (1990); Donaldson and Davis (1994)). As a result, the supporters of this theory claim that the higher corporate performance will be associated with most of the internal directors as they may normally working for profit of the shareowners. In the accustomed term of motivation MacGregor (1960), the stewardship theory serves as the “Theory Y” facade of managers to agency’s “Theory X” view, reasoning that an exaggeration on observing is non-essential for the board of directors to impact on the corporate performance.

Under Stewardship theory managers are usually trustable (Donaldson (1990); Donaldson and Davis (1994)) with a minimum agency costs and the top executives are unlikely to affect share shareholders returns for the fear of compromising on their reputation Donaldson and Davis (1994).

According to the agency theory, there is no evident applied proof to bear anyone claim that a supremacy of the inside directors provides a high combined performance. As this theory is a reflection of the agency theory, it is worth repeating that the overwhelming indication of both from separate works e.g. (Daily and Dalton (1993); Kesner, Victor, and Lamont (1986)) and meta-inspection (Dalton et al. (1998); Rhoades, Rechner, and Sundaramurthy (2000)) ineffective to specify any clear relationship among the board formation and/or leadership construction and the corporate performance.

### 3. Theoretical Framework



Relationship of each given category of the annual report product mix and corporate governance is studied for their respective impact on the earning volatility. The relationships are studied as to how earning volatility is affected by the corporate governance and product mix with the items of traditional lending activities, fee-based activities, board size, board independence and CEO power on revenue volatility and degree of total leverage.

#### 4. Methodology

In this paper, banking sector of Pakistan constituted the proposed population. Currently, there were 33 banks operating in the country. Therefore, population constituted of Public, commercial, and Islamic banks. Due to the variation in the changes in the implementation of policy among the public, private, specialized and foreign banks, the data induced biasness if gathered from all 33 banks because specialized and foreign banks have different policy changes. Hence, population should be adjusted to have only public, private, commercial and Islamic banks. This study considered 26 commercial and Islamic banks in its sample. The sample that was used in this study was the annual basis. The annual reports from 2005-2015 of banks were analyzed and used to test the hypothesis. Considering the sample size of 26 public, commercial and Islamic banks and time period of 11 years, the total observations size becomes 286.

The given table 4.1 provided the construction of the variables

**Table 4.1: Construction of the Variables**

Variables	Proxies	Source
Lending Activities	Loan Share = $\frac{\text{Revenue from loans}}{\text{Total Assets}}$	(De Young & Roland, 2001)
Fee-based Activities	Fee-based Share = $\frac{\text{Revenue from Fee-based}}{\text{Total Assets}}$	(De Young & Roland, 2001)
Revenue Volatility	$RV_i = \text{std. dev. of } \% \Delta r_i$ $= \sqrt{\frac{\sum_{t=1}^N (\% \Delta r_{it} - \bar{r}_i)^2}{N}}$	(De Young & Roland, 2001)
Degree of Total leverage	$DTL = \frac{\% \Delta \pi}{\% \Delta r}$	(De Young & Roland, 2001)
Board Size	= Number of directors on the board.	(Mamatzakis & Bermpei, 2015)
Board Independence	= $\frac{\text{Independent members}}{\text{Total member}}$	(Mamatzakis & Bermpei, 2015)
C.E.O Power	= dummy if CEO in board is 1 and 0 otherwise	(Mamatzakis & Bermpei, 2015)

Bank Size	=ln (Total Assets)	(Brown & Dinc, 2011)
GDP	=Annual GDP growth	(Mergaerts & Vennet, 2015)
Interest Rate	=Annual Lending rate	(Delis & Kouretas, 2011)

## 5. Results

This section includes the analysis of the study and presented the results of the Pakistani banking sector. The data analysis is presented with descriptive statistics, regression results using fixed and random technique. The results are confirmed by checking the robustness of the data of Islamic and Commercial banks. This section presents evidence for the impact of product mix and corporate governance on the earnings volatility of the sample banks in Pakistan.

### 5.1. Statistical Data Analysis

#### 5.1.1. Descriptive Statistics

**Table 5.1: Descriptive Statistics**

Variables	<u>Mean</u>	<u>Max.</u>	<u>Min.</u>	<u>Std. Dev.</u>	<u>Skewness</u>	<u>Kurtosis</u>
<sup>1</sup> RV	0.096	0.372	0.0007	0.067	0.949	2.239
<sup>1</sup> DTL	0.219	1.265	-1.062	0.534	0.625	1.103
<sup>2</sup> LA	0.191	0.385	0.051	0.048	0.729	2.065
<sup>2</sup> Fee Act.	0.018	0.119	8.05e-06	0.022	0.935	1.376
<sup>3</sup> Board size	8.572	14	4	1.798	0.734	2.979
<sup>3</sup> Board indep.	0.410	0.875	0	0.235	0.324	2.478
<sup>3</sup> CEO power	0.963	1	0	0.187	-0.978	2.787
<sup>2</sup> Size	8.171	9.248	5.678	0.577	-0.677	2.688
<sup>4</sup> GDP	3.88	7.7	1.6	1.889	0.440	2.310
<sup>4</sup> Interest Rate	12.49	14.5	9.1	1.622	-0.556	2.527

Note. N = 26, T = 11, <sup>1</sup>obs. = 223, <sup>2</sup>obs. = 231, <sup>3</sup>obs. = 222, <sup>4</sup>obs. = 286

The reported values of mean for revenue volatility (RV) were 0.096, and the standard deviation was 0.067 for the entire period of ten years. This means that the volatility in revenue of sample banks remained at 9.6% of the total revenues generated by banks with the variation of  $\pm 6.7\%$ . The highest observed value for revenue volatility is 0.372 of the total revenue for JS Bank in 2007. Out of the total product mix, lending activities showed the mean value of 0.191 with the standard deviation of 4.8%.

In corporate governance variables, board size is the most common that depicted the mean of 8.572 for the entire sample with a deviation of 1.798. Board independence shows the number of independent directors on board that had the mean value of 0.41 with the deviation of 23.5%.

CEO Power depicted the mean value of 0.963 with the standard deviation of 18.7%. As this variable is taken as a proxy so the maximum value is 1 and the minimum value is 0. All the banks had the value of 1 in all years except JS bank that had the 0 value for the period of 2006 to 2013.

Bank size is micro-control variable while GDP and Interest rates are macro-controlling variables. These control variables are used because they have direct impact on the earnings and volatility of bank. Mean value of GDP is 3.88 with the estimated deviation of 1.889. Whereas, its maximum value is 7.7 in 2005 and the minimum value is 1.6 in 2009 which is a period of world economic recession. Similarly, interest rate has the average value of 12.49 with the deviation of 1.622.

The Skewness and kurtosis depict the normality of the statistics. For normally distributed figures, the values of Skewness lie between 1 to -1 and the value of kurtosis range between 3 to -3 Bai and Ng (2005). All the variables under discussion fulfill the requirements and are normally distributed.

### 5.1.2. Pearson Correlation Matrix

The matrix for the impartial variables is shown in Table 5.2. According to Washington et al. (2010) Pearson's correlation matrix demonstrates the correlation of the variables, especially among the independent variables. A Strong correlation (i.e. value of coefficient > 0.80) between the independent variables results into the problem of multicollinearity.

**Table 5.2: Pearson Correlation Coefficient Matrix**

	<u>LA</u>	<u>Fee Act.</u>	<u>Board Size</u>	<u>Board Ind.</u>	<u>CEO Power</u>
<sup>1</sup> LA	1				
<sup>1</sup> Fee Act.	0.207***	1			
<sup>2</sup> Board Size	-0.091*	-	1		
		0.014***			

<sup>2</sup> Board Indp.	-0.186**	-0.056*	0.041	1	
<sup>2</sup> CEO Power	0.062	-0.053	0.035**	-0.051	1

Note. N = 26, T = 11, <sup>1</sup>obs. = 231, <sup>2</sup>obs. = 222

\*p < .1, \*\*p < .05, and \*\*\*p < .01

The values of correlation coefficients in the table 5.2 suggested that there exist no multicollinearity problem. All the variables have weak correlation. Hence, it ruled out the issue of multicollinearity. These correlation values established grounds for hypothesis testing.

### 5.1.3. Variance Inflation Factor

**Table 5.3: Variance Inflation Factor (VIF)**

Variables	VIF	1/VIF
LA	1.19	0.837
Fee Act.	1.27	0.790
Board Size	1.02	0.978
Board Indp.	1.06	0.943
CEO power	1.05	0.952
Size	1.10	0.905
GDP	4.03	0.170
Interest Rates	4.01	0.169

Variance inflation factor (*VIF*) and tolerance are the tests that are used to detect the multicollinearity in the model of study. This is considered to be the best measure of multicollinearity than Pearson correlation matrix. VIF is the advanced form. The higher the VIF, the more collinear the variables are and vice versa. 1/VIF is called tolerance and 1/tolerance is the VIF (O'Brien, 2007).

The standard value of VIF should be less than five and the value of tolerance must be higher than 0.1 which is shown by  $0.05 < VIF < 5$  (O'Brien, 2007). All the variables fulfill the conditions of VIF and tolerance that shows no multicollinearity. This means that the independent variables are not correlated with each other.

#### 5.1.4. Test for Model Specification

Ramsey RESET test is used to check the model specification error. If some relevant variable is not included or some irrelevant variable is included then there appears an error called model specification error Bera and Jarque (1982). The null hypothesis for this test is that model has no omitted variables. In both cases of revenue volatility and degree of total leverage, the null hypothesis accepted and indicated that there are no omitted variables in the regression equation. The result of specification error signifies that null hypothesis is not rejected and there exists no errors in the model.

**Table 5.4: Ramsey RESET Test**

	<u>RV</u>	<u>DTL</u>
F(3,203)	1.68	2.31
Prob.	0.1721	0.0779

H<sub>0</sub>: Model has no omitted variables

#### 5.1.5. Test for Heteroskedasticity

**Table 5.5: Breusch-Pagan / Cook-Weisberg Test**

	<u>RV</u>	<u>DTL</u>
Chi <sup>2</sup>	0.18	0.33
Prob.	0.672	0.563

H<sub>0</sub>: Constant variance

The main proposition of *OLS* regression is the homogeneity in the variances of the residuals. In this study, Breusch-Pagan test is used to find the consistency in variances. The null hypothesis shows that the variances are constant Breusch and Pagan (1979). If the value of probability is more and the value of chi-square is less, the alternate hypothesis will be rejected. This indicates that there is no heteroskedasticity and the variances are constant.

#### 5.1.6. Regression Results

The regression technique to compute results in this study are fixed and random effects panel least square. This regression technique is used because the data is panel and it has cross sections and time series properties. This analysis technique contains the information necessary to explain intertemporal changes and the individuality of the entities being examined (Fox, 1997). The results of panel data techniques i.e. regression effect model and its related tests are discussed as follows:

**5.1.6.1. Fixed effect panel least square**

Table 5.6 provides the results of fixed effect panel least square of revenue volatility and degree of total leverage with independent and controlled variables. The value of regression in revenue volatility related to lending activities was 24.5% which means that 1 unit increase in lending activities reduces revenue volatility by 24.5%. The association turned out to be significant at 10% that depicted the increase in lending activities decreases revenue volatility. Fee-based activities have a positive significant impact on revenue volatility. The increase in fee-based activities with 1 unit will increase revenue volatility by 45.1%; significant at 1%.

**Table 5.6: Fixed Effect Panel Least Square**

Variable	RV		DTL	
	Parameter Estimate	t-stats	Parameter Estimate	t-stats
Constant	0.834	3.25***	4.980	2.85***
LA	-0.245	-1.90*	-1.178	-1.63
Fee Act.	0.451	3.57***	6.101	4.26***
Board Size	0.005	1.10	0.036	1.07
Board Indp.	0.003	0.08	0.232	1.62
CEO Power	-0.086	-3.90***	0.118	0.83
Size	-0.057	-1.48	-0.468	-2.29**
GDP	-0.005	-1.43	-0.054	-1.11
Interest rate	-0.014	-3.07***	-0.086	-1.80*
Ramsey RESET		0.1721		0.0779
R <sup>2</sup>		0.3430		0.2173
F		11.88***		5.70***

Note. N = 26, T = 11, obs. = 215

\*p < .1, \*\*p < .05, and \*\*\*p < .01

Board size, board independence, size, and GDP are insignificant under fixed effect model. CEO power and interest rates showed negative significant impacts that reflect that they are contributing in the reduction in revenue volatility. CEO power and interest rates are significant at 1%. R<sup>2</sup> indicated that 34.30% of the variations in the dependent

variable are contributed by the independent variables. F-statistics indicate the significance of the model at 1%.

The above table also provides the output of the regression using fixed effect model related to degree of total leverage. Fee-based activities have positive significant impact at 1% level of significance. Corporate governance variables and lending activities show insignificant impact on degree of total leverage. Size of the bank Afzal and Mirza (2012) and interest rate have negative impact significant at 5% and 10% respectively. The R<sup>2</sup> is 21.73% of the variations in DTL. However, the model is significant at 1%.

### 5.1.6.2. Random effect panel least square

Table 5.7 exhibits the results of OLS estimates applying random effect model for both dependent variables. The value of regression coefficients shows inverse significant relationship in lending activities, CEO power Donaldson and Davis (1994) interest rate and size of bank with revenue volatility DeYoung and Rice (2004), significant at 1%. GDP is negatively significant at 10%.

**Table 5.7: Random Effect Panel Least Squares**

Variable	RV		DTL	
	Parameter Estimate	z-stats	Parameter Estimate	z-stats
Constant	0.715	5.03***	2.724	3.19***
Lending Activities	-0.286	-2.90***	-2.023	-2.40**
Fee-based Activities	0.569	4.32***	5.629	3.38***
Board Size	0.007	1.80*	0.037	1.97**
Board Independence	-0.004	-0.16	0.228	1.87*
CEO power	-0.104	-9.88***	-0.086	-2.03**
Size	-0.033	-2.31**	-0.015	-0.39
GDP	-0.008	-1.71*	-0.096	-1.69*
Interest Rate	-0.018	-3.72***	-0.161	-3.03***
Ramsey RESET		0.1721		0.0779
R <sup>2</sup>		0.3327		0.1898
Chi <sup>2</sup>		856.43***		199.07***

Note. N = 26, T = 11, obs. = 215

\*p < .1, \*\*p < .05, and \*\*\*p < .01

Fee-based activities depict positive impact significant at 1%. 1 unit change in fee-based activities brings 56.9% increase in the revenue volatility. Board size is positively significant with revenue volatility at 1% level of significance (Lipton & Lorsch, 1992). Board independence shows insignificant relationship with the dependent variable. The model explained for 33.27% of the variations in dependent variable. The value of  $\chi^2$  shows the significance of model at 1%.

The table also shows the results of random effect panel least square of the degree of total leverage. Lending activities depict strong negative association Amidu and Wolfe (2013) with DTL i.e. 1 unit increase in lending activities results into the 240% decrease in the degree of total leverage; 5% significance. Fee-based activities have positive relationship with DTL significant at 1%. Board size depicts positive association with degree of total leverage at 5% significance Pathan and Faff (2013). Board independence is positively significant at 1%. It means that the increase in board independence results in the increase in earnings volatility of banks. CEO power is negatively significant at 5% which shows that the presence of CEO in the board of directors results into the reduction in earnings volatility of banks in Pakistan. GDP and interest rate shows negative association with degree of total leverage significant at 10% and 1% respectively. Size of banks shows insignificant relationship. The  $R^2$  is 15.86% of the variations in dependent variable.

The regression analysis could incorporate either one of the effects either fixed or random based on the results of Hausmann tests.

**5.1.6.3. Hausmann specification test:**

Hausmann test was applied to get the most significant model and consistent effects for assessment. Hausmann test signifies whether random effect is suitable for study or fixed effect is appropriate for that specific research. The results of the Hausmann test are given in table 5.8. There is an assumption for random effects that is; no covariance among the independent variables and the error terms. This is null hypothesis in Hausmann specification test. If probability values are less than 0.05 then alternate hypothesis is accepted and the null hypothesis is rejected. Therefore, fixed effect model will be used. On the other hand, if the values of probability are greater than 0.05 then random effect model will be applied to explain the results of the aforesaid study Hausman (1978).

**Table 5.8: Hausmann Specification Test**

Variable	RV			DTL		
	Fixed	Random	$\delta^2$ (Diff.)	Fixed	Random	$\delta^2$ (Diff.)
LA	-0.246	-0.287	0.041	-1.179	-2.023	0.845
Fee Act.	0.451	0.569	-0.118	6.101	5.629	0.471

Board Size	0.006	0.007	-0.001	0.037	0.037	-0.000
Board Indp.	0.003	-0.005	0.007	0.232	0.228	0.004
CEO Power	-0.086	-0.104	0.018	0.118	-0.086	0.205
Size	-0.057	-0.033	-0.024	-0.469	-0.015	-0.454
GDP	-0.005	-0.008	0.003	-0.054	-0.096	0.042
Interest Rate	-0.014	-0.018	0.004	-0.086	-0.161	0.075
Ramsey RESET			0.1721			0.0779
Chi-Sq.			5.10			10.57
Prob.			0.7463			0.2270

Note. N = 26, T = 11, obs. = 215

The table 5.8 shows that the null hypothesis of Hausmann specification test is accepted in revenue volatility and degree of total leverage, so random effect is used to apply the most accurate results for the hypotheses of revenue volatility and degree of total leverage in this study. In the Hausmann test, there appears a very small difference which shows no covariance among variables.

### 5.2. Robustness Checks

Robustness checks are used to clarify the hypothesis as suggested by DeYoung and Roland (2001). The results of random effects are used to explain revenue volatility and degree of total leverage mentioned in this study. To check the robustness, pooled data is applied separately to the data of Islamic banks and robustness to the data of Commercial banks was used and the tests were applied. These tests proved the results of random effect model for revenue volatility and results of fixed effect model for degree of total leverage.

**Table 5.9: Robustness Checks of Islamic Banks vs. Commercial Banks in Pakistan**

Variab les	ISLAMIC BANKS				COMMERCIAL BANKS			
	Pooled OLS		Random Effect Model		Pooled OLS		Random Effect Model	
	<u>RV</u>	<u>DTL</u>	<u>RV</u>	<u>DTL</u>	<u>RV</u>	<u>DTL</u>	<u>RV</u>	<u>DTL</u>
	<u>Parame</u> <u>ter</u>	<u>t-stats</u>	<u>Parame</u> <u>ter</u>	<u>t-stats</u>	<u>Parame</u> <u>ter</u>	<u>z-</u> <u>stats</u>	<u>Parame</u> <u>ter</u>	<u>t-stats</u>

	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>
	<u>e</u>	<u>e</u>	<u>e</u>	<u>e</u>	<u>e</u>	<u>e</u>	<u>e</u>	<u>e</u>
Constant	0.737	3.93** *	0.409	0.52	0.686	4.73* **	2.298	3.02* **
LA	-0.126	- 4.30** *	-0.288	- 2.29* *	-0.372	- 5.38* **	-2.513	- 2.97* **
Fee Act.	0.480	1.69*	8.652	10.81 **	0.449	2.54* *	3.778	1.94*
Board Size	0.013	2.25**	0.041	1.70*	0.003	0.82	0.035	2.62* **
Board Indp.	0.094	1.49	0.359	4.02* **	-0.029	-1.13	0.003	0.02
CEO Power		Omitted	Variabile		-0.114	- 9.18* **	-0.174	- 4.17* **
Size	-0.077	- 3.30** *	-0.153	- 1.98* *	-0.019	-1.26	0.087	1.62
GDP	-0.008	- 2.54**	0.059	0.52	-0.007	- 2.17* *	-0.078	-1.47
Interest	-0.014	- 1.97**	0.006	0.13	-0.019	- 5.47* **	-0.174	- 3.18* **
R <sup>2</sup>		0.4917		0.523 5		0.411 0		0.188 2

Note. N = 5, T = 11, obs. = 30 (IB)

N = 21, T = 11, obs. = 185 (CB)

\*p < .1, \*\*p < .05, and \*\*\*p < .01

The separate robust results for Islamic and Commercial banks are used to check the validity of the data. Table 5.9 signify the robust results of Islamic and Commercial banks. In case of Islamic banks, the number of cross sections is less than the time period. This contradicts the assumptions of robustness. That's why pooled OLS is used to get the most accurate results. The results of Islamic banks show that lending activities have

negative significant impact with revenue volatility at 1% level of significance. Fee-based activities have positive impact significant at 10%. Board size has positive significant impact at 5% Jensen & Meckling, (1976). Board independence reflects insignificant relationship. CEO power was omitted in case of Islamic banks because all the Islamic banks use CEO duality concept to increase the performance and decrease the volatility in earnings. It is automatically removed by STATA to remove collinearity.

In case of control variables, size, GDP and interest rates have negative significant impact on revenue volatility significant at 1% and 5% respectively Chiorazzo, Milani, and Salvini (2008). The  $R^2$  is 49.17% and adjusted  $R^2$  is 92.67% which shows the overall variation in dependent variable due to independent variables.

Table 5.9 indicate the robust results of degree of total leverage by considering Islamic banks data. Lending activities indicate negative effect on degree of total leverage Klein and Saldenberg (1998) while fee-based activities show positive significant impact. Lending activities and fee-based activities were significant at 5%. The corporate governance variables .i.e. Board size and board independence shows positive significant effect on degree of total leverage with significance at 10% and 1%. GDP and interest rates have insignificant impact on degree of total leverage. The  $R^2$  is 52.35%.

The robust results of commercial banks for revenue volatility indicate negative relationship with lending activities with 1% significance and positive relationship with fee-based activities at 5% level of significance (DeYoung and Roland (2001); Stroh and Rumble (2006)). CEO power shows strong negative association with revenue volatility Pathan (2009), significant at 1%. GDP and interest rates have negative relationship with revenue volatility at 5% and 1% level of significance. Board size, board independence and size of bank depicts insignificant relationship. The  $R^2$  is 41.10% and the adjusted  $R^2$  is 52.12%. As far as DTL is concerned for commercial banks, it shows negative relationship with lending activities, CEO power and interest rate significant at 1%. Fee-based activities and board size shows positive significant relationship with degree of total leverage in commercial Pakistani banks at 10% and 1% level of significance. The value of  $R^2$  is 18.82%. The robust results proved the regression results for this study.

## 6. Discussion

Lending activities indicated negative significant impact on revenue volatility and degree of total leverage in the Pakistani banks. As the main source of earnings in Pakistani banks is through the loans, so lending activities are more stable and depict that the risk of banks will decrease by increasing lending activities. The degree of total leverage that is the degree of operating leverage and the degree of financial leverage depicted the operating and financing conditions in the banks. The traditional lending activities of the banks are based upon the bank-customer relationship. Because of switching and information costs, it proved to be very difficult for borrowers as well as lenders to stay away from lending activities. As the lending relationship is established

so fixed cost is the one time cost for banks and then there exists only the variable costs that make operating costs less for the banks. Moreover, financial leverage can be reduced by banks because they have to hold some equity capital against outstanding loan balances DeYoung and Roland (2001). The decrease in operating and financial leverage result into decrease in total leverage and the risk of bank is reduced. Similarly, (Amidu and Wolfe (2013); Chiorazzo et al. (2008); Gurbuz, Yanik, and Ayturk (2013); Stiroh and Rumble (2006)) validated that the lending activities are more stable and reduced earnings volatility.

Fee- based activities showed positive significant relationship with revenue volatility and degree of total leverage in the banking industry of Pakistan. While non-interest income is regarded an essential source of diversification but in contrast with the conventional view; DeYoung and Roland (2001) identified that non-interest income increases the earnings volatility of banks and the same is true for Pakistani banks. Stiroh and Rumble (2006) signify that product diversification is the important element in an increase in bank risks. Low switching cost; high operating and financial leverage essentials for fee based activities formulate non-interest earnings more volatile related to traditional interest based activities. Over-diversification of revenues raises the risk of insolvency rather than raising profits Delpachitra and Lester (2013). Moreover, the strategies relating to diversification need great care because extensive diversification can decrease the financial performance of banking industry (Sahoo & Mishra, 2012). Stiroh and Rumble (2006) explained non- interest earning is more volatile than interest earning but may not be more beneficial.

The hypothesis regarding the impact of board size on revenue volatility and degree of total leverage states that board members have significant impact on revenue volatility and degree of total leverage. The findings relating to this hypothesis shows that board size has a positive impact on revenue volatility and degree of total leverage in Pakistan. This result is similar to agency cost hypothesis mainly for the banks that have more than ten members on board. The board members may have different views that will result into the conflict. That conflict is agency conflict. The inevitable part of agency costs is the relationship between managers and owner. This suggests that an increase in the number of board members could result in information asymmetry and communication costs Jensen and Meckling (1976). Similarly Lipton and Lorsch (1992) and Pathan and Faff (2013) also support the similar results.

The other variable that is board independence is being rejected by this study. It shows insignificant impact of board independence in banking industry of Pakistan with revenue volatility. This shows that there is no effect in constitution of board whether it contains outside members or the inside members in the boards of banks in Pakistan. Choi and Hasan (2005) observed the insignificant impact of board independence during their study for the sample of Korean banks from 1998 to 2000.

Board independence shows positive significant impact on degree of total leverage. The inside directors have more knowledge and experience about the banks so the outside

directors may reduce performance and increase volatility in the banking sector of Pakistan Wiseman and Gomez-Mejia (1998). This is in line with the Stewardship hypothesis. The other reason is that the outside members may involve in political activity that could lead in the increase in volatility of the banks' earnings and could reduce the cooperation among inside and outside members Westphal (1999).

CEO power is negatively related to revenue volatility and degree of total leverage in the banking industry of Pakistan in line with the stewardship hypothesis. Donaldson (1990) suggested that the CEO duality enhances the performance because he has strong control over the management of the company. Pathan (2009) found the inverse connection among CEO power with risk taking. It means that CEO duality reduces the risk taking and decreases the volatility in the banks' earnings. Donaldson and Davis (1994) suggested that the inside directors spend more time in the company so they have more knowledge about the company and therefore can take prudent decisions.

Size of banks indicated negative significant impact on revenue volatility in the banks of Pakistan. Bank size has a direct relationship with the performance; it means big banks have better performance as they have more diversification opportunities. Well managed banks gradually move towards diversification and they have larger diversification opportunities as compared to smaller banks (Chiorazzo et al. (2008); DeYoung and Rice (2004)). (Chiorazzo et al. (2008)) revealed that the merits of diversity in product mix are more at the big banks whereas small banks acquire incentives only if the ratios of interest free earnings to whole earnings are comparatively less. The findings confirmed the 'Too big to fail hypothesis' view which states that the big banks have more cushion to absorb risk. They can take more risk with highly profitable opportunities to diversify in product mix activities. Salas and Saurina (2002) indicated that larger banks are less susceptible to risks because they have expert managers who can work efficiently. They also reported that big banks can diversify loan portfolio better due to huge economies of scale and scope. The large banks are able to serve more clients and provide better services to their clients DeYoung and Rice (2004).

Bank Size shows insignificant relationship with degree of total leverage. It means that the operating activities of banks are not affected by the size of the banks in Pakistan because the operating activities depend more on the managerial capacity and efficiency De Jonghe (2010).

GDP and interest rate have negative significant impact on both revenue volatility and degree of total leverage. It shows that the GDP growth of country reduces risks in Pakistani banks. The operating and financial risks are reduced. As the GDP growth reflects prosperity in the country, so it helps in the growth and prosperity of banks accordingly. Most of the banking literature indicates that a high GDP growth signifies the more stable macroeconomic conditions in the country and a relatively less bank stress (Borio and Lowe (2002); Festić, Kavkler, and Repina (2011); Poghosyan and Čihak (2011)). As the interest rates are high, banks engaged in more lending activities and wanted to maximize profits. This results in the increase in probability of earnings

by the customers. As analysed by Black and Scholes (1973) higher levered institutions like banks mostly have greater variation in volatility that increases value of the firm as it enhances the chance of a favourable pay-out to owners. Hoggarth, Sorensen, and Zicchino (2005) found that interest rates and inflation have the negative effect on financial stability and quality of loan portfolio.

## **7. Conclusion**

The study concluded that the lending activities have inverse relationship with the revenue volatility and the degree of total leverage in banking sector of Pakistan which has implications for policy makers De Jonghe (2010). Further, fee-based activities demonstrated the adverse impacts with revenue volatility and degree of total leverage which has implications for the risk taking behaviour of banks in Pakistan Mercieca, Schaeck, and Wolfe (2007). Based on the findings of the study conventional school for the diversification is negated and suggested to focus on their lending portfolio to gain maximum advantage out of it with fewer fluctuations in volatility Ismail, Hanif, Choudhary, and Nisar (2015). Board size prescribed to be small because the large board size increased earnings volatility in Pakistani banks. It advocates that the board size has to be small to increase banks performance and decrease volatility Lipton and Lorsch (1992). Board independence depicted positive relationship with DTL which means that the board should not include more independent directors. CEO confirmed the stewardship hypothesis which endorsed the CEO duality in banking sector Pathan (2009). Size of the banks reflected significant relationship with revenue volatility. This is compatible with the concept that growth in bank size decrease volatility of banks earnings and therefore contributes positively in the performance of banks Boyd and Prescott (1986). GDP signified the growth in the country help to reduce volatility in Pakistani banks. This relationship was seen before in the studies of Baselga-Pascual, Trujillo-Ponce, and Cardone-Riportella (2015). Interest rate suggested being high because the increase in interest rate decreases the volatility of earnings.

### **7.1. Recommendations**

The findings of present study confirmed the significance of product mix and corporate governance on earnings volatility in the banking industry of Pakistan. The study has useful implications for bankers, regulators (SBP) and policy makers. The following recommendations are based on the findings of this study.

- The study confirmed the usage of lending portfolio as a means for the diversification of risk. Therefore, it is suggested that banks focus on their lending portfolio in the future and build long term relationship with the customers to lessen the switching costs as evident from the work of Stiroh and Rumble (2006).
- From this study, it can also be recommended that banks need to keep the size of the board less than 10. Therefore, the study recommends Al Baraka, Askari and MCB to keep 10 members in board. The large board increases the volatility of banks earnings and therefore decreases the performance. Hence small board size increases efficiency of board members.

- The banks should continue to include CEO as a member of board to increase board efficiency as evident from the literature which is in line with the stewardship theory where CEO duality proved to be more effective.

### 7.2. Future Research Avenues

The following research areas can be sought for further discussion on this topic suggested by the results of this study.

- Further study can be conducted by elaborating each aspect of non-interest portfolio. The separate effect of each income can give more precise results.
- The data set for long periods can be used to find the objectives of research.
- More variables can be included in the corporate governance factor.
- Cross-cultural comparison can be studied further with data of banks from world over.
- The function of fee-related activities in capital needs can be worked out.

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## The Relationship between Transformational Leadership and Job Performance: An Empirical Investigation

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### Abstract:

The main objective of the present paper is to assess the relationship between transformational leadership and job performance empirically. The study was conducted in the banking sector of Pakistan focusing on six large banks. A total number of 308 responses were collected through survey questionnaire from the bank managers. The data was then coded into SPSS for early stage analysis such as data screening. This was followed through applying SmartPLS to analyze the data and the results have been presented in its standard reporting style. The findings revealed a positive relationship between transformational leadership and job performance in banking sector of Pakistan supporting the hypothesized relationship. Finally, the paper has presented a way forward for future research.

**Keywords:** Transformational Leadership, Job Performance, Banks, Pakistan, SmartPLS

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## 1. Introduction

Leadership is considered very crucial for accelerating the improvements in the corporate settings. It also potentially influences job performance of individual employees. This is true due to the fact that leadership possesses the ability to motivate, guide followers to realize mission, vision and objectives of the organization. It also helps employees in order to be innovative and creative for the promotion of new ideas. Similarly, leadership is well recognized due to the fact that it helps employees and organizations in adapting emerging changes, building teamwork and improving their overall capabilities. Therefore, it becomes necessary to evaluate the influence of leadership over individuals as well as organizational performances.

In this vein, academic scholars have mutually agreed that the ultimate success of the business organizations depends on the connections between the leader and their followers (Chu, Yang, and Chen (2011); Lau and Tong (2008); Wang, Oh, Courtright, and Colbert (2011)). This relationship based alignment becomes critical as the leaders need to prepare their followers for adapting to the continuous change processes, face turbulent technologies, cultural changes and more importantly the ever-changing environmental challenges (Chu et al. (2011); Wang et al. (2011)). Although there is a huge stream of literature on leadership that speaks about several leadership styles, the prominent amongst them have been transformational, transactional, and laissez-faire Bass (1985). However, the recent research has revealed that transformational leadership stands more effective in influencing employee performance and has been called as a most significant benchmark in the business organizations (Levy, Cober, and Miller (2002); Sarros and Santora (2001)).

Therefore, the main objective of the present study was to replicate the influence of transformational leadership over job performance in the six large banks of Pakistan. This investigation holds importance due to several reasons. First, such an investigation has not been made in the six large banking sector context of Pakistan. As a result, there has been lack of clarity in terms of how well transformational leadership could influence the individual job performance. Second, the present study has conceptualized job performance on the basis of two important elements, namely, task performance and organizational citizenship behavior, as such an investigation has not been made earlier in the Pakistani context. Third, the findings of the present study have presented insights that have been in line with the studies that have specifically been conducted in the developed context, such results have enriched the prevailing literature on transformational leadership by providing empirical evidence on its effectiveness in the banking sector in Pakistan. Last, the literature on the proposed relationship and job performance has been reported inconsistent (Dolatabadi and Safa (2010); Mohammad Mosadegh Rad and Hossein Yarmohammadian (2006); Shah, Hamid, and Bin (2015); Voon, Lo, Ngui, and Ayob (2011)). Therefore, this has encouraged the present study to further investigate the proposed relationship under LMX theory Graen (1976).

## 2. Review of the Literature

The effectiveness employee's behaviors for meeting job related objectives have been denoted as job performance McCloy, Campbell, and Cudeck (1994). However, researchers have differently conceptualized the notion of job performance. However, this addressed notion has remained centrally important because it critically contributes to the overall organizational performance Organ (1977).

According to Campbell (1990) job performance is an important construct in organizational psychology as well as in human resource management. Whereas Jamal (2007) determined job performance as an individual's function carrying out efficiently within the prevailing constraints and the resources available. The meaning of Job performance varies depending upon job to job. Some researchers including Campbell (1990) have developed broader scope of performance which can be generalized for various jobs. Campbell introduced eight factors related to job performance a) job specific proficiency, b) non-job specific task proficiency, c) Effort to Demonstrate, d) written and oral communication, e) to maintain personal discipline, f) marinating team and peer performance, g) supervision and leadership, h) administration and management. He further was of the opinion that all factors are not relevant towards all jobs and all of these factors can be used to portray job performance for any possible occupation. Moreover, all factors and content of factors varies from job to job, primarily each factor is one of motivational element. The study conducted by Hochwarter, Kiewitz, Gundlach, and Stoner (2004) has further added social worth towards all these factors. The scholars have pointed out that job performance is a multidimensional concept which consists of task related performance and contextual elements highlighting the social skills predicting as job performance. A huge amount of research has been conducted in order to understand the main variations among employees and their job performance. The studies conducted by Beck, Behr and Beck, Behr, and Guettler (2012) on gender, Ittner, Larcker, and Pizzini (2007) on salary, Ng and Feldman (2008) age, Hourani, Williams, and Kress (2006) on stress, have determined that all these variables have relationship with job performance.

More importantly, the mature literature on job performance has highlighted two core components namely, task performance and OCB (Borman and Motowidlo (2014); Motowidlo, Borman, and Schmit (1997); Organ (1988)). According to Lee, Tan, and Javalgi (2010) task performance or in role performance are those behaviors which are directly related to the responsibilities, duties and tasks which are prescribed and are documented in job description. Kanter (1988) has conceptualized task performance as innovative performance, which refers the qualities of the employees' skills like creativity and problem solving techniques at workplace. Likewise OCB or extra role behavior is important at work place to be innovative to generate, promote and to realize creative ideas to bring organizational successes (Janssen and Van Yperen (2004); Lee et al. (2010)). According to (Austin and Villanova (1992)), every individual is different in several ways in relation to job role behaviors where measures are criteria to identify

such differences. A large number of constituencies have used such criteria for measures used in applied psychology. Some of them used evaluation criteria as work behavior theories some used effective human resources administration and some used provision for feedback to the individuals. As a result, however, an index that measures the significance of the observation that most, if not all, of the pioneers of industrial-organizational psychology has addressed this issue during his career. The paper reviews the development of conceptual and methodological problems related to the standard of 1917, as the size of the organization, methods of measurement, analysis, and use the classification framework competing values from which to view performance metrics.

Regardless of an extensive history of apprehension on issues of condition, the construct of the employee performance has not yet been mapped completely. Campbell (1990), Motowidlo and Van Scotter (1994) argued that the investigation of employment complicated techniques is accessible to recognize the tasks and significant behaviors, but their focal point is mainly experimental and normally precise jobs or job families. Therefore, they have not formed reasonable hypothetically fundamental underlying dimensions which can be used to portray the performance necessities of jobs in all-purpose. More theoretical attempts to divide the area of performance are opening to confirm hopeful symbols. They adopt extremely unusual conceptual orientations, dissimilar investigative approaches to conventional employment and the other, but they unite on the difference between task performance and contextual performance (Borman and Motowidlo (1993); Borman and Motowidlo (2014); Motowidlo and Van Scotter (1994); Shah et al. (2015)). As reported in Motowidlo and Van Scotter (1994), Katz and Kahn (1978) state that theoretical scheme is more fundamental for the job performance and partitioning is tripartite splitting up between i) to join the organization and remain in, ii) to meet the expected standards or even exceeding standards as framed by organization, and iii) be innovative, and spontaneous to go ahead of the roles and actions in terms of cooperation with all members, giving suggestions to bring improvements, protection against harm, carry out personal development and building the image of organization. Further, Orr, Sackett, and Mercer (1989) have confirmed about the importance of two actions by providing empirical support on it. Their study showed that at least few supervisors are inclined to prescribed and flexible behaviors in consideration in measuring dollar value on job performance for hypothetical analyst for the programmers.

The transformational leadership style is the one that seeks to uplift the wishes of the individual followers for their desired achievements and also for self-development. On the other hand, it promotes development for the group as well as the organization Bass and Avolio (1990) and motivating the followers to produce the output more than it is desired originally expected Bass (1985). More specifically, transformational leaders influence their followers, and they operate as a role model for succeeding leaders. They provide encouragement and inspirational motivation to the subordinates. They also exhibit individualized consideration, acting as coaches and mentors, contribute to the

development of their subordinates to reach high skills and goals, and make struggle to meet up their subordinates' requirements for development and success. Finally, transformational leaders present intellectual stimulation by cheering and inspiring to become innovative and creative to see their issues from different angles, and to form diverse ways for resolving those issues. They give confidence to their subordinates to face challenges and try different approaches to achieve success Bass and Riggio (2006). Therefore, the transformational leaders build up a strong stand to transport a transformational change in organization. The study conducted by Alimo-Metcalfe and Alban-Metcalfe (2005) considered as an extensive study which is based on more than 3,500 respondents in United Kingdom by using 360 degree feedback method reinforced the argument that the ability of the leader, specifically transformational leader is crucial at all levels of organization and very critical to cope up changes for organizational development.

### **2.1. Transformational Leadership and Job Performance**

Literature provides sufficient evidence that leadership positively influences organizational outcomes (Bass, Avolio, Jung, & Berson, 2003; Luthans, Avey, Avolio, and Peterson (2010)). More specifically, scholars have empirically suggested that leadership styles influence job performance significantly Howell & Avolio, (1993). Further to this notion, the past researchers have also been interested in investigating the individual influence of each of the leadership style over job performance. In doing so, the researchers have revealed that out of many varying leadership styles the most prominent variables have been transformational and transactional leadership styles (Avolio, Bass, and Zhu (2004); Ehrhart (2004); Whetstone (2002)). Further to these evidences from the literature, it has also been reported in the past studies that transformational leadership alone holds greater influence over job performance when compared to transactional leadership style Gardner and Stough (2002). The same assertion of the effectiveness of transformational leadership over transactional leadership has been conferred by several studies. Refer for example, (Bass et al. (2003); Dvir, Eden, Avolio, and Shamir (2002)). Similarly, while investigating transformational leadership along with organizational and individual job performance, studies have provided strong empirical evidence (Argyris and Schön (1996); Glynn (1996); Hurley and Hult (1998)). The transformational leadership has also been regarded as an important variable in the literature of leadership due to the fact that it drives the followers in setting and meeting their respective job related objectives Kelman (1958).

Apart from the above evidence on the influence of transformational leadership over job performance, the literature has also suggested findings that are inconsistent (Dolatabadi and Safa (2010); Mohammad Mosadegh Rad and Hossein Yarmohammadian (2006); Voon et al. (2011)). Therefore, the present study, in the light of leader member exchange (LMX) theory Graen (1976) aimed at investigating the postulated relationship between transformational leadership and job performance in the banking sector of Pakistan.

### 3. Methodology

#### 3.1. Sample and Population

The data was collected from branch managers for reporting an appropriate description of the role of leadership over job performance. For this reason, 302 responses were collected from a total 1314 population of branch managers of six large banks of Pakistan. The sample for the population was drawn following Krejcie and Morgan (1970). Further, the present study used the proportionate random sampling technique, after initial screening 297 cases were used for the final analysis.

#### 3.2. Instrumentation

The dependent variable job performance that consisted of task and OCB as a sub-components, was measured using job performance scale developed by Williams and Anderson (1991) with 37 items and Transactional leadership was measured using Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1995) with 12 items. The survey participants were asked to self-evaluate perceived job performance and transactional leadership style on a five point Likert scale with 1 indicating (strongly disagree) and 5 as (strongly agree) was employed.

#### 3.3. Demographics

A larger proportion of the survey participants were male (94.9%). However, the majority of respondents were in 31 to 40 years of age group with 39.1% and lowest percent falls in 51 or above age group that is with 8.1 percent. 84.2% managers were married and 15.8% are unmarried. A larger portion of managers comprised graduates with 91.2% whereas, undergraduate were 7.4%. The major two groups of the managers have salaries PKR 40,000 or less with 21.5% and PKR 80,000 or above with 21.2%. The detailed demographics of the respondents are given in Table 1.

**Table 1: Demographic Profile of Respondents**

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>		
Male	282	94.9
Female	14	4.7
<b>Age</b>		
20-30 years	74	24.9
31-40 years	116	39.1
41-50 years	82	27.6
51 and above	24	8.1
<b>Position</b>		
Branch Manager	155	52.2
Operations Manager	141	47.5
<b>Experience</b>		
Less than five years	46	15.5
5 to less than 10 years	117	39.4

10 to Less than 15	49	16.5
15 to less than 20	32	10.8
20 to less than 25	17	5.7
25 to less than 30	15	5.1
30 and above	21	7.1
<b>Qualification</b>		
Undergraduate	22	7.4
Graduate	271	91.2
Post Graduate	4	1.3
<b>Monthly Income</b>		
40K or less	64	21.5
41 to 50 K	56	18.9
51 to 60K	51	17.2
61 to 70K	33	11.1
71 to 80K	30	10.1
81 to above	63	21.2
<b>Marital Status</b>		
Married	250	84.2
Unmarried	47	15.8

#### 4. Analysis and Results

The present study employed Partial Least Square (PLS) path modeling Wold, (1974) for the analysis of the study variables. In this connection specifically the study used (Smart PLS) Ringle, Wende, and Will (2005) due to its user friendly nature and robust results.

##### 4.1. Measurement Model Results

The individual item reliability, internal consistency reliability and discriminant validity were ensured for reporting reliability and validity of the study. First, for assessing individual item reliability the outer loadings were used Hair, Sarstedt, Ringle, and Mena (2012).

Table 1: Measurement Model Results

<b>Latent Variables</b>	<b>Items</b>	<b>Loadings</b>	<b>AVE</b>	<b>CR</b>
<b>OCB</b>	JPOCB28	0.635	0.507887	0.877521
	JPOCB32	0.6434		
	JPOCB33	0.7902		
	JPOCB34	0.759		
	JPOCB35	0.7744		
	JPOCB36	0.6335		

	JPOCB37	0.7325		
<b>Task</b>	JPTSK1	0.8404	0.568272	0.793599
	JPTSK2	0.8201		
	JPTSK3	0.571		
<b>TRFIC</b>	LS26	0.6936	0.542949	0.702952
	LS28	0.7778		
<b>TRFIIA</b>	LS16	0.7393	0.589992	0.741363
	LS23	0.7968		
<b>TRFIIB</b>	LS12	0.784	0.650021	0.787785
	LS30	0.8278		
<b>TRFIM</b>	LS24	0.8256	0.629303	0.772284
	LS7	0.7592		
<b>TRFIS</b>	LS27	0.7374	0.632447	0.774052
	LS29	0.849		

**Table 2: Discriminant Validity**

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
<b>OCB</b>	<b>0.712</b>						
<b>TRFIC</b>	0.347	<b>0.736</b>					
<b>TRFIIA</b>	0.299	0.332	<b>0.768</b>				
<b>TRFIIB</b>	0.356	0.414	0.327	<b>0.806</b>			
<b>TRFIM</b>	0.309	0.408	0.453	0.383	<b>0.793</b>		
<b>TRFIS</b>	0.328	0.501	0.356	0.445	0.326	<b>0.795</b>	
<b>Task</b>	0.298	0.362	0.376	0.431	0.368	0.404	<b>0.753</b>

Note: Bold diagonal figures are the square root of AVE while others represent correlations.

The present study retained 0.5 and above loadings (Barclay, Higgins, and Thompson (1995); Chin (1998)) refers Table 1. Moreover, for determining the internal consistency reliability the composite reliability coefficients were used (Bagozzi and Yi (1988); Hair, Ringle, and Sarstedt (2011)). Accordingly, the composite reliability should be at least 0.7 or above (Table 1). Hence, the present study successfully met the internal consistency reliability.

Next, the discriminant validity was ascertained using AVE following Fornell and Larcker (1981). According to whom, the square root of AVE should be greater than the correlations among latent variables.

### 4.2. Structural Model Results

The bootstrapping approach was used for assessing path coefficients with 5000 bootstraps and 297 cases Hair et al. (2012). The results of the bootstraps are provided in Table 3 and Figure 1.

**Table 3: Path Coefficients and Hypothesis testing**

Relationship	Beta	SE	t-statistics	Decision
Transformational Leadership -> Job-Performance	0.11111	0.033051	3.361784	Supported

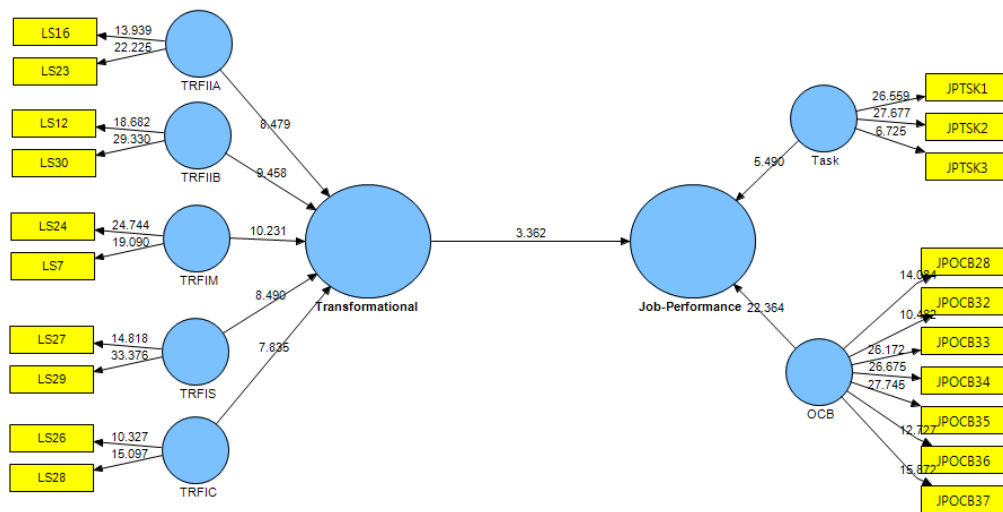


Figure 1: structure model assessment

The results of the bootstraps have revealed a significant relationship between transformational leadership and job performance (beta=0.11, t=3.36), thus, supporting the proposed hypothesis. Next, the present study provides the r-square assessment. According to the results provided in Table 4, it is suggested that the transformational leadership has explained a variance of 8.7 percent.

**Table 4: Variance Explained in the Endogenous Variable**

Latent Variable	Variance Explained
Job performance	8.7%

## 5. Discussion

The main objective of the study was assessing the transformational leadership and job performance relationship in the six large banks of Pakistan. The result of the study has revealed that transformational leadership is positively associated with job performance. This assertion informs that the branch managers in the six large banks of Pakistan perceive that their leadership uplifts their desires and wishes for overall accomplishments and the self-development of individuals Bass and Avolio (1990). This positive empirical evidence also provides that the leadership of the six large banks of Pakistan attempts to motivate the individual followers for producing expected outputs. Based on this empirical evidence, it could be stated that the leadership of these banks acts as their role models, provides individualized considerations, acts as coaches and mentors and is contributing in the overall development of the individuals Bass and Riggio (2006).

In addition, the results of the present study have revealed that 8.7 percent of the variance is explained by the transformational leadership in the job performance of branch managers of six large banks of Pakistan. This suggested that the transformational leadership plays a positive role in enhancing the individual job performance in the investigated settings. These results are also in line with other studies that support the positive association between transformational leadership and job performance (Dolatabadi and Safa (2010); Mohammad Mosadegh Rad and Hossein Yarmohammadian (2006); Shah et al. (2015); Voon et al. (2011)). In the light of Leader Member Exchange (LXM) theory Graen (1976), this study provides empirical evidence that transformational leadership contributes positively in the increasing the job performance of bank managers. The investigation of transformational leadership and job performance relationship was mainly conducted in the six large banks of Pakistan. Therefore, the future researchers may increase the scope of this investigation for further confirming the results of the present study, preferably at the country level by incorporating the public and private banks and other financial institutions. It shows that there are other factors which are more than 90 percent, that can influence to enhance job performance additionally, the present study used cross-sectional design. Therefore, it is suggested that in future a longitudinal based analysis may be performed.

## 6. Conclusion

The objective of the present study was to assess the results pertaining to the effectiveness of transformational leadership and job performance relationship in the light of LMX theory. This assessment has provided empirical evidence in the Pakistani context suggesting that transformational leadership is perceived important by the bank managers in the six large banks of Pakistan.

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## **Financing the Fiscal Deficit in Pakistan: Evidence on Ricardian Equivalence**

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### **Abstract:**

This study investigated the validity of Ricardian equivalence hypothesis in case of Pakistan. Annual time series data from 1978 to 2013 has been used for analysis. Two models have been estimated; structural consumption function and structural saving function. The results of unit root tests explored that all the variables have different order of integration. The results of ARDL co-integration approach verified the existence of a long run relationship among variables for both models. By using OLS, wald test rejects the restrictions on both models and concludes that Pakistan is a non-ricardian economy.

**Keywords:** Ricardian Equivalence Theory, Budget Deficit, Pakistan

### **1. Introduction**

Fiscal deficit has become a major problem among developing countries. The objective of stabilization policy in Pakistan is to raise private consumption and reduce fiscal deficit. When government expenditure exceeds from its revenue, there exists fiscal deficit. It is very essential to evaluate the sources to finance this deficit. Government has three ways to finance this deficit: through increasing tax rate, borrowing, and printing money Gumus (2003). Every source has its own consequence on the economy. Therefore, it is very essential to evaluate the effects of financing the deficit through every source. Increase in tax rate or levying new taxes are hard to implement because people don't admire it Bird and Zolt (2003). Printing money leads to inflation Dem, Mihailovici, and Gao (2001). That's why only convenient option left for government is

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to finance its deficit through borrowing. Lot of work has been done on the effects of financing the deficit from borrowing. Regarding the impact of deficit financing through borrowing, there are two schools of thought: Ricardian and Keynesian.

The concept of Ricardian Equivalence has been presented by Ricardo (1817) which is further expanded by Barro (1974). Ricardian equivalence hypothesis (REH) states that a debt financed tax cut would not increase private consumption as well as aggregate demand because consumers know that they have to pay higher taxes in future after the maturity of the debt. Therefore, they save this extra tax cut and buy bonds because they know that after the majority of debt they would be able to pay higher taxes. Therefore, in case of REH private saving increases while national saving and investment remains unchanged Kazmi and Shabbir (1992). Hence Government's aim to increase consumption and decrease budget deficit is not fulfilled, because consumers are forward looking, and fiscal policy is ineffective in this case. REH is basically having equivalence between taxes and debt. Government either finances her deficit through borrowing or increasing tax rate, both have similar effect on private consumption. REH holds in the presence of certain assumptions like consumers are infinitely lived, rational, perfectly informed and have no saving purpose, consumers face no liquidity constraints and taxes are lump-sum Malengier and Pozzi (2004).

According to Keynesian school of thought, a debt financed tax cut would increase consumption and aggregate demand because consumers assume this tax cut as a blessing and don't think about their future generations because they prefer present to future. They do not consider government bonds as net wealth. In result of tax cut, their private consumption increases while private saving remains unchanged. Hence fiscal policy is effective in Keynesian case Tcherneva (2011).

The present study is an effort to investigate the validity of Ricardian equivalence hypothesis in Pakistan by using the annual data from 1978-2013. We utilized both function, consumption and saving function and tested the hypothesis by utilizing cointegration approach.

The rest of the study is organized as the second part presents the studies that checked the validity of REH. The part three describes the data and methodology. The fourth part explains the results of the study and the last part gives conclusion and presents policy options based on results.

## **2. Review of Literature**

Ricardo (1817) first time presented the concept of Ricardian Equivalence. This concept was further expanded by Barro (1974). After that, this topic got so much importance in research. Many other researchers have tried to check the validity of REH. Some of them explained this topic in case of Pakistan and each of them have their own limitations. Di Laurea and Ricciuti (2002) tried to test the deviation from Ricardian equivalence through creating an overlapping generation experiment. The paper consists of three

steps. The first step consists of theoretical model, which is ideal for Ricardian equivalence. Therefore, this accepts the Ricardian Equivalence hypothesis. According to theory, there are two main reasons of rejection of the Ricardian equivalence; presence of liquidity constrained consumers and insecurity about future income. That's why second step included liquidity constrained consumers in the model and third step introduced insecurity of future income in the model. Second and third steps reject the validation of Ricardian equivalence hypothesis. Malengier and Pozzi (2004) explored the validity of Ricardian Equivalence proposition using panel data for the period 1980-1997. The data is collected for the 19 OECD countries. They construct a nonlinear consumption function with two types of consumers. The consumer who focuses on current income called rule of thumb consumers and the consumers who consider budget limitations of government called permanent income consumers. By using moment conditions, Generalized Method of Moments (GMM) is estimated. One-level and two-level bootstraps are applied to check this estimator. The results show that in OECD countries, 25% consumers are rule-of-thumb consumers and remaining 75% are permanent income consumers. The study concludes that first type of consumers fail to accept the Ricardian Equivalence proposition while second type also rejects the hypothesis if government asks these consumers to consume less and save more as precautionary measure from their permanent income. The study by Cunningham and Harberger (2005) tried to test the validity of Ricardian Equivalence by using Ricardian disposable income. "Ricardian" income of a state refers to the subtraction of net addition to debt and Federal Debt share of the state from standard disposable income. Time series data of income is collected from U.S. States and regression analysis is run. First regression is applied using standard disposable income and then using Ricardian disposable income to check the electricity consumption in different states. Relative price and real income are used as regressors in standard tests while other test adds natural gas price and whether as variables. The results of standard tests show more significant results than later tests and are more preferable.

Afonso (2008) checked the private consumer response to government indebtedness in EU countries. The objective of the paper is to test the existence of debt neutrality hypothesis in EU countries. Debt neutrality hypothesis refer to ineffectiveness of private consumption in response of Government debt policies. The study consists of panel data onto the period 1970-2006 and estimate Euler equation. The paper rejects the existence of debt neutrality hypothesis in EU countries and concludes that private consumption decreases due to high government indebtedness.

Waqas and Awan (2011) explored the validity of Ricardian Equivalence proposition using annual data from Pakistan. A Structural consumption function is estimated for the period 1973-2009. Johansen cointegration approach is applied and finds long run relationships among variables. This paper rejects the existence of REH because fiscal policy is quite efficient in Pakistan. Furthermore, Waqas and Awan (2011) tried to check the existence of REH and causes of its rejection in Pakistan. Engle and Granger and Johansen Co-integration approaches are used to find out the long run relationships

among variables. Generalized method of moment is used for estimation. This paper concludes that REH fails in case of Pakistan because of the presence of infinite horizon and liquidity constraint. Waqas and Awan (2012) investigated the validity of Ricardian equivalence hypothesis in Pakistan using time series data from 1973 to 2010. The study utilized the ARDL co-integration approach in order to find out the short run and long run relationship among variables. Wald test is applied to check restrictions on REH. Result of Wald test rejects these restrictions and study found no evidence of Ricardian equivalence Hypothesis in Pakistan.

Saeed and Khan (2012) explored the existence of REH in Pakistan using time series data for the year 1972-2008. A simple consumption function is estimated. Johansen co-integration technique is applied after stationarity check to find out the long run relationship among variables. Error correction method (ECM) is used to check the short run relationship among variables. The paper concludes that no evidence is found in favour of Ricardian equivalence hypothesis. Oseni and Olomola (2013) tried to check the empirical existence of REH in Nigeria using time series data for the period 1981-2011. A model based on permanent income hypothesis (PIH) is estimated. Johansen co-integration approach is used for long run relationship and ECM is estimated for short run relationship. Results support the existence of REH in Nigeria with respect to the coefficient of government expenditure. According to the results, relationship between Government debt and wealth also supports the existence of REH, whereas signs of personal income and taxes do not support REH in Nigeria.

From literature it has been witnessed that there are mixed results regarding the validity of REH, some studies accepted this phenomenon while some rejected it. There is also evidence in the literature of partial validity of assumptions of REH.

### **3. Materials and methods**

#### **3.1. Variables and Data Sources:**

Annual time series data from 1978 to 2013 has been used to explore the effects of different variables on private consumption (PC) and private saving (PS) in Pakistan. Variables included in the model are private saving (PS), private consumption (PC), tax Revenue (TR), government budget deficit (GBD), government debt (GD), disposable income<sup>3</sup>(DI) and wealth<sup>4</sup> (W). Data sources are IFS, hand book of statistics on Pakistan economy and different years of Economic surveys of Pakistan.

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<sup>3</sup>A proxy variable of Gross National Income

<sup>4</sup>Proxy variable is calculated by adding Government debt and M2 by following Waqas and Awan (2011)

The study utilized following equations; structural consumption and structural saving function, for empirical results

**a. Structural Consumption Function:**

We used structural consumption function that has been used by Waqas and Awan (2011) with certain modifications.

$$PC = \alpha_0 + \beta_1 TR + \beta_2 GD + \beta_3 DI + \beta_4 W + u \dots \dots \dots (1)$$

Where PC stands for Private consumption, TR indicates tax revenue, GD is government debt, DI indicates disposable income and W stands for wealth. Consumption function has following restrictions which must be fulfilled for the acceptance of REH.

$$\beta_1 = 0, \beta_2 = 0, \beta_4 = \beta_2$$

1<sup>st</sup> two restrictions explain that tax revenue (TR) and government debt (GD) both must be equal to zero which affirms that private consumption is not affected by changes in TR and GD. While government debt and wealth must be equal which affirm that amount of consumers purchased bonds and government's deficit financing are the same.

**b. Structural Saving Function**

We used structural consumption function that has been used by Kazmi (1994) with certain modifications.

$$PS = \alpha_0 + \beta_1 TR + \beta_2 GBD + \beta_3 GD + \beta_4 DI + u \dots \dots \dots (2)$$

Where PS stands for private saving, TR indicates Tax revenue, GBD stands for Government budget deficit, GD indicates Government debt and DI indicates Disposable income. Saving function has following restrictions:

$$\beta_2 = \beta_3, \beta_2 + \beta_3 = 0, \beta_1 + \beta_4 = 0$$

The 1<sup>st</sup> restriction states that government debt and government budget deficit must be equal which affirms that amount of government issued bonds and budget deficit is same. The 2<sup>nd</sup> restriction explains addition of tax revenue and government debt must be equal to zero. The 3<sup>rd</sup> restriction explains that addition of tax revenue and disposable income must also be equal to zero.

**4. Empirical Findings:**

Time series data is non-stationary in nature which provides spurious results. Therefore, it is necessary to check the stationarity of variables. This study used two unit root tests

to check the stationarity of variables; Augmented Dickey Fuller (ADF) and Kwiatkowski, Phillips, Schmidt, and Shin Test (KPSS).

**Table 1: Unit root results**

Variables	ADF		KPSS	
<i>Trend and Intercept</i>				
	Level	Difference	Level	Difference
PC	-0.321563	-4.734473*	0.180230*	0.131579**
PS	2.243240	9.116222*	0.220388	0.168465*
TR	4.975051*	-3.320362***	0.196124*	0.170207*
GBD	5.169262*	3.078548	0.176096*	0.184458*
GD	2.463822	-6.809577*	0.194967*	0.0705***
DI	6.091870*	4.455183*	0.191130*	0.083689***
W	4.041738**	-2.920203	0.203627*	0.167542*
Variables	ADF		KPSS	
<i>Intercept</i>				
	Level	Difference	Level	Difference
PC	1.869660	-4.602997*	0.790286*	0.412153**
PS	4.464899*	0.292213	0.634945*	0.693458*
TR	10.44711*	1.633731	0.698804*	0.599464*
GBD	7.071057*	3.446997**	0.597073*	0.541901*
GD	4.912321*	-0.954815	0.638045*	0.442346**
DI	6.991688*	8.228461*	0.604358*	0.229271***
W	4.386865*	-0.954815	0.622842*	0.571522*

PC is private consumption; PS is private saving; DI is disposable income; TR is tax revenue; GBD is Government budget deficit; GD is Government debt and W stands for wealth. \*shows the significance level at 1% and \*\* shows at 5% and \*\*\* at 10% level. This is taken from Mankinon (1996) one-sided p-values.

Normally time series have trend and intercept, but this study estimated the stationarity test by using both situations: with trend and without trend. The results of ADF under trend and intercept show that TR, W, GBD and DI are stationary at level while PS, GD and PC are stationary at first difference. The result of KPSS test under trend and intercept shows all variables are stationary at level except PS, which is  $I(1)$ . The results of unit root tests explore that all the variables have different order of integration. Therefore, the study utilized the ARDL co-integration approach for both models.

#### *a. Structural consumption function:*

The study utilized the ARDL co-integration approach for structural consumption function in order to find out the short run and long run relationship among variables. 1st step is to check the co-integration between variables.

**Table 2: Result of bound test for co-integration**

Variables	F-Statistics	Conclusion
F(PC GD,DI,TR,W)	10.3359***	Cointegration
F(GD TR,DI,PC,W)	24.7573***	Cointegration
F(TR GD,DI,PC,W)	39.8470***	Cointegration
F(DI GD,TR,PC,W)	3.1026 **	No Cointegration
F(W DI,GD,TR,PC)	202.5745***	Cointegration

Note: AIC and SBC were used for the lag length. \* shows that the statistic lies below the lower bound, \*\* it falls within the lower and upper bounds and \*\*\* it presents outside the upper bound.

The results of Bound tests for co-integration show that there exists long run relationship among variables because F-statistics is higher than upper bound, which rejects the Null hypothesis which is No Co-integration.

After estimating bound test for co-integration, ECM is estimated to find out the short run relationship by selecting base on SBC-ARDL (1, 1, 1, 0, and 0). ECM explains the speed of convergence toward equilibrium. Small value of error correction term shows low speed of convergence to equilibrium.

**Table 3: Results of error correction model**

Error Correction Representation for the Selected ARDL Model			
ARDL(1,1,1,0,0) selected based on Schwarz Bayesian Criterion			
Variables	Coefficient	T-Ratio	Prob
Constant	261578.3	1.6627	[.108]
dTR	-2.0486	-1.9544	[.060]
dDI	-.15848	-3.6909	[.001]
dGD	.11038	.55126	[.586]
dW	-.13640	-.62214	[.539]
ECM(-1)	-.13840	-1.2832	[.210]
R-Squared	.78393	R-Bar-Squared	.72791
S.E. of Regression	131237.8	F-stat	19.5917[.000]
DW-statistic	1.8652		

Note: R-Squared and R-Bar-Squared measures refer to the dependent variable dPC and in cases, where the error correction model is highly restricted, these measures could become negative.

Results show that coefficient of ECM is negative and insignificant; hence equilibrium will diverge in case of any shock to independent variables. TR and DI show that they have significant effect on private consumption (PC) in the short run while GD and W provide in-significant results. The negative sign of TR and DI shows that they have inverse relationship with PC. OLS technique has been used to estimate consumption function. Wald test rejects all restrictions.

**Table 4: Results of OLS technique**

Variables	Coefficients	t-value
Constant	1483542	23.34893
$\Delta$ TR	-3.518880	-2.012569
$\Delta$ GD	0.959398	3.557664
$\Delta$ DI	0.223289	-3.271691
$\Delta$ W	0.691142	2.050832
$\beta_1=0, \beta_2=0, \beta_3=\beta_4$		
F-statistic = 42.85623 [0.0000]		
R-Square	0.970189	D.W 0.709912
SER	249089.5	F-Statistics 252.2198
Adjusted R-Square	0.966342	

According to OLS results, there exist negative relationship between tax revenue and private consumption. While, private consumption is positively related with disposable income, wealth and government debt. Hence there is an absolute disagreement between our results and theory of REH. Therefore, REH does not hold good in Pakistan. Our results are in line with several Pakistan based studies that includes Kazmi and Shabbir (1992), (Waqas and Awan (2011), 2012)), and Saeed and Khan (2012).

**b. Structural saving function:**

The study also utilized the ARDL co-integration approach for structural saving function. The results of Bound tests for co-integration show that there exists long run relationship among variables because F-statistics is higher than upper bound, which rejects the Null hypothesis of No Co-integration.

**Table 5: Result of bound test for co-integration**

Variables	F-Statistics	Conclusion
F(PS GBD,GD,DI,TR)	6.3597***	Cointegration
F(GBD GD,TR,DI,PS)	15.7197***	Cointegration
F(GD GBD,TR,DI,PS)	10.4915***	Cointegration
F(TR GD,GBD,DI,PS)	16.7120***	Cointegration
F(DI GD,TR,GBD,PS)	3.9738 **	No Cointegration

Note: AIC and SBC were used for the lag length. \* Indicates that the statistic lies below the lower bound, \*\* it falls within the lower and upper bounds and \*\*\* it lies outside the upper bound.

**Table 6: Results of error correction model**

Error Correction Representation for the Selected ARDL Model		
ARDL(1,0,1,0,1) selected based on Schwarz Bayesian Criterion		
Variables	Coefficient	T-Ratio[Prob]

Constant	-40654.6	-1.6586[.109]	
dTR	1.6032	4.2928[.000]	
dDI	0.084955	3.5179[.001]	
dGD	0.041492	0.35286[.727]	
dGBD	-0.047665	-0.20068[.842]	
ECM(-1)	-0.74450	-5.1040[.000]	
R-Squared	0.74882	<u>R-Bar-Squared</u>	.68370
S.E. of Regression	90942.8	<u>F-stat</u>	16.0988[.000]
DW-statistic	1.6108		

Note: R-Squared and R-Bar-Squared measures refer to the dependent variable dPS and in cases, where the error correction model is highly restricted, these measures could become negative.

ECM results shows that coefficient of ECM is negative and significant; hence equilibrium will converge in case of any shock to independent variables. Tax revenue and disposable income show that they have significant effect on private saving in the short run while, government debt and government budget deficit provide insignificant results. The positive sign of tax revenue and disposable income show that as the tax revenue and disposable income increase the private saving also increases. Tax revenue and disposable income have positive relationship with private saving. The OLS technique has been used to estimate saving function. The result of Wald test partially rejects the restrictions of REH.

**Table 7: Results of OLS technique**

Variables	<u>Coefficients</u>	<u>t-value</u>	
Constant	216.6789	.0067847[.995]	
D TR	1.6617	3.3813[.002]	
D GBD	.48425	1.6765[.104]	
D GD	-.26684	-1.8012[.081]	
D DI	.072830	3.3900[.002]	
$\beta_2 = \beta_3, \beta_1 + \beta_3 = 0, \beta_1 + \beta_4 = 0$			
F-statistic = 16.44059[0.0000]			
R-Square	.96572	D.W	1.4851
SER	130010.0	F-Statistics	218.3333[.000]
Adjusted R-Square	.96130		

According to OLS results, there exist negative relationship between government debt and private saving. Private saving is positively related with disposable income, tax revenue, and government budget deficit. There is partial negation between our results and theory of REH. Therefore, REH is also rejected in case of saving function. Our results are in line with (Kazmi (1995); Kazmi and Bilquees (1993); Kazmi and Shabbir (1992)) that also partially rejected the REH in case of Pakistan

## 5. Conclusion and policy implication

We checked the validity of Ricardian equivalence hypothesis in Pakistan by using time series data from 1978 to 2013. Two functions have been specified to investigate the existence of REH; consumption function and saving function. The results of unit root tests guide us to utilize the ARDL co-integration approach for both models to find out the short run and the long run relationship among variables. The results verify the existence of long run relationship among variables. Both functions are estimated using OLS technique. Wald test completely rejects the restriction on consumption function and partially rejects the restrictions on saving function. Thus, the study found no evidence of Ricardian Equivalence Hypothesis in Pakistan. The study confirms that fiscal policy is effective in Pakistan because consumers increase private consumption due to tax cut. Hence fiscal policy can be used as a major stabilization policy. Furthermore, there is a need to widen the tax base instead of increasing tax rate.

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## **Determinants of Organizational Performance: A Case of Punjab Police**

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### **Abstract:**

In the last three decades, the security issues have been raised in the state of the Punjab (Pakistan) which ultimately leads to the breakdown of the country's economy. However, the purpose of this paper is to determine the effect of the political interference on the performance of Punjab police (Pakistan) with the moderating role of organizational support. To elicit the findings, a total of 159 survey questionnaires were compiled from station house officers (SHOs) of Punjab police (Pakistan). Furthermore, this study has applied PLS-SEM technique to analyze the data. The findings reveal that a negatively significant effect of political interference on the performance of Punjab police (Pakistan). Moreover, the findings also showed the significant moderating effect of organizational support in the instance of political interference.

**Keywords:** Pakistan Organizational Performance, Political Interference, Organizational Support, Punjab Police, Pakistan, PLS-SEM.

### **1. Introduction**

Since the last two decades, state governments are more concerned about enhancing the performance of public organizations McBride (2008). Furthermore, government institutions around the world are searching for improving their performance in terms of program outcomes, use of public resources, citizen participation, and customer satisfaction, strengthen integrity, transparency, combat and prevent corruption, and

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accountability Ashour (2004). These reforms are important and crucial to enhance the performance of public organizations, protecting public performance, and strengthen the government's role in providing basic services and development. In addition to this, Ashour (2004) also pointed out that such reforms in the public organizations need to enhance its effectiveness and efficiency. To continue this, one of the foremost public department is the law enforcement agency that helps to retain the law and order situation in the society and provide a peaceful safety environment to the citizens. To create a good relation and to maintain the confidence level is the major duty of the police that links an ordinary citizen with the organization Bouffard and Piquero (2010).

Pakistan is the 6th largest country of the world in terms of population Ministry of Finance (2012). In addition to that, Punjab being a leading populous province (60% of the country) should contribute greatly in the economy of the country, especially since the most important and historic foreign direct investment (FDI) of 46 billion US dollars has just taken place in the shape of China-Pakistan Economic Corridor (CPEC) which is expected to further strengthen trade and economic cooperation between the two countries Tiezzi (2014). However, the unprecedented law and order situation in the country in general and Punjab in specific, the country's economy is sluggish Jabbar and Mohsin (2014). Ideally, in a modern state, it is important for state's police or law enforcement agencies to perform better and reduce crime rates. Therefore, state authorities must recognize the crime issues and security concerns to provide friendly environment to foreign investor for boosting the economy of the country by inviting foreign investments in the largest province of Pakistan. In fact, this specific area has received less attention by academics and it is perceived that political interference is one of the main reason of poor performance of Punjab police (United States Institute of Peace, 2011). Moreover, due to lack of organizational support, political interference escalates in the police department. In addition to this the report published by the United States Institute of Peace as cited above, mentioned that different political parties and politicians influence the police department significantly. Majority of the higher posts in Police department, has been politicized by the political elites. For the last one decade, most of the officers have been placed in different areas based on the political connections. The situation of crime rate is more than worst, as stated in the cited report.

It is important to note here that there are other factors that may be affecting the organizational performance, however, in this specific case of police department of Punjab, where the political interference surpasses every other factor resulting in non-functionality of the police department with respect to implementing the law.

With this in mind, this study is to examine the effect of political interference on the performance of Punjab police (Pakistan) with the moderating role of organizational support, with the presumption that this political interference brings every other factor to a static position, where its performance impact seems to be spurious or deemed impossible to judge.

## **2. Review of Literature**

### **2.1. Organizational Performance**

Organizational performance is defined as a measure of how an organization is managed well and how an organization can deliver the value to their customers and stakeholders Moullin (2007). Moreover, Antony and Antony and Bhattacharyya (2010) defined organizational performance as the tool and measurement that is used to assess and evaluate the organization's success to create and deliver value to its internal and external customers. Moreover, organizational performance facilitates an organization to make some pre-determined strategy for making profit and increasing market share, high performance and productivity Koontz and Donnell (1993) In regard of this, earlier researchers have studied that the organizational performance basically based on the business performance Richard, Wu, and Chadwick (2009). Conversely, organizational performance can be measured through six dimensions, which are; efficiency, effectiveness, innovation, quality, productivity and profitability Sink and Tuttle (1989). A positive police image is necessary for the police to work effectively, as the police rely on citizens' cooperation in reporting crimes or providing information (Bouffard and Piquero (2010); Yuksel and Tepe (2013)).

### **2.2. Political Interference**

In the field of management, very few studies have been conducted to examine the relationship between political interference and performance in the public sector Usang and Salim (2015). While, this subject matter remains a thoughtful challenge to both administrative practitioners and politicians in government. The previous research has suggested that the local politicians influence the criminal justice systems outcomes generally and specifically Stucky (2005). Likewise, in the background of Punjab police, politicians badly effect police performance, because they influence the duties and decisions of Punjab police (United States Institute of Peace, 2011). Furthermore, the researchers have confirmed that the police executives claimed that politicians intervene in the departmental decisions Koper, Maguire, Moore, and Huffer (2001). However, the department is not empowered to take any decision freely and working as an autonomous body and that is one of the reason of declining the performance.

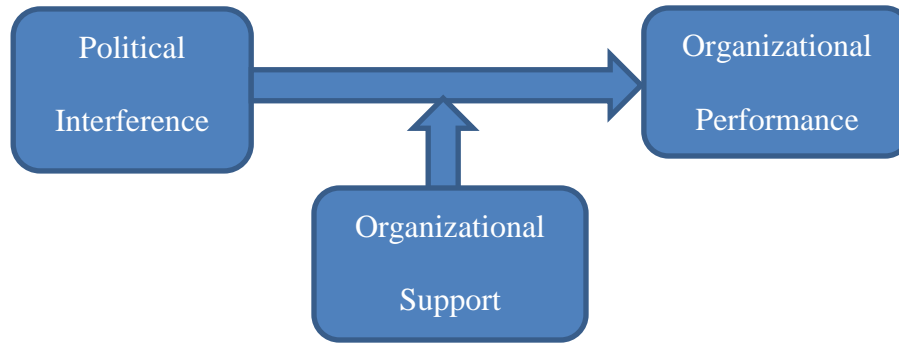
According to the earliest researcher, Fyfe, Greene, Walsh, Wilson, and McLaren (1997) has demonstrated that police organization is influenced severely by the variation across local political systems. In the support of the above argument, various researchers depicted that politicians affect the justice system as a violence (Jacobs (1998); Stucky (2003)). Some scholars have argued that interference of higher government is important for policy direction, while others view it purely on self-interest of higher government (Chang and Wong (2002); Shleifer and Vishny (1994)). Political interference refers to influences applied by higher authorities of government or political leaders on the administration of public institutions. Although, the basic responsibility of every state's government is to perform a supervisory role in proper functioning of the local governments, but their influences have become overwhelming Asaju, (2010).

### **2.3. Organizational Support**

Organizational support has been considered as the moderating variable in the present study. One of the vital feature that has been widely discussed to affect employees' performance is organizational support such as resources (IT, Financial and Human), infrastructure, social and moral support Mathis and Jackson (2004). In addition, as it is said earlier, employees' performance lead to organizational performance, therefore, organizational support is a significant factor to enhance organizational performance. The notion behind is that employees may not be effective in performing their roles if they lack adequate skills, latest technology, financial resources and empowerment from the top management. Employees' performance is primarily a consequence of organizational support as it permits employees to utilize their competencies effectively. Organizational support may not only augment employees' motivation to take their job seriously, but it might also enhance the employees' willingness to perform better Lin and Lin (2011). According to Mathis and Jackson (2004) numerous factors influence on employees' performance comprising their abilities, efforts expended and the organizational support they receive. Kane, Crawford, and Grant (1999) found that employees' effectiveness can be attained by organizational support. While, Black, Jensen, and Gregersen (2003) argued that it is very difficult for employees to get adequate support from the organization due to the lack of financial investments in this particular area. Whereas, Sharif and Ahmad (2009) have originated that organizational support has some moderating role in the studies of behavioural variables in organizations. Consequently, organizational support is expected to moderate the relationship of political interference with organizational. According to Bouranta, Siskos and Tsotsolas (2015) suggested in their study that employee should be encouraged to learn new skills and department should keep updating their employees with new changing infrastructure. Another duty of the police department is to empower their officials, though they can freely take their decisions. Moreover, top management support is vital for the subordinate officers that empowers them to make decisions independently and according. However, the influence from political parties retrain the police department from top level to the bottom, hence jeopardize the important role of police in the law implementation.

### **3. Research Framework**

The research model shown in figure 1 exhibits the predictor variable i.e., political interference that predicts organizational performance through moderating role of organizational support.



**Figure: 1 - Research Model for Present Study**

Based on the above research model the following hypotheses are anticipated.

**H1:** *Political interference is significantly related to organizational performance as perceived by personnel of Punjab police.*

**H2:** *Organizational support moderates the relationship between political interference and organizational performance as perceived by personnel of Punjab police.*

#### 4. Data and Methodology

The survey instrument for the present study is adapted from the prior researches (Kaplan and Norton (2005); Newman, Thanacoody, and Hui (2011); Sharif and Ahmad (2009)) using five point Likert scale and it is modified through proper alteration that is appropriate for the context of Punjab police (Pakistan). The data was collected through survey questionnaire; however, 234 questionnaires were distributed to the station house officers (SHOs) of the Punjab police, out of which 159 questionnaires were received which makes 68% response rate. The sample size of the current study was established grounded on the benchmark specified by Krejcie and Morgan (1970). Nonetheless, the present study has employed the simple random sampling technique for efficient data collection since SHOs are extremely busy to fulfill their duties and responsibilities. In addition, before sending the survey questionnaire for actual data collection a pilot study has been conducted with 30 SHOs to confirm the reliability and validity of the instrument using Cronbach's alpha Gardner Gardner (1995). The alpha values of all the variables are above 0.70 which shows that all the constructs are reliable and they should be retained in the study. Moreover, assessment of the measurement model, more specifically, convergent validity and internal consistency have been tested using SmartPLS3 through assessing the values of Average Variance Extracted (AVE) and Composite Reliability (CR) grounded on the criteria specified by scholars (F. Hair Jr, Sarstedt, Hopkins, and G. Kuppelwieser (2014); Fornell and Larcker (1981)). Conferring to Hair, Anderson, Babin, and Black (2010) it is inevitable that latent constructs should explain a minimum half of the variance ( $AVE > 0.50$ ) in the indicators. The values of AVE and CR for latent constructs have met and surpassed the lowest threshold value suggested by above mentioned scholars. However, all the constructs are valid and reliable, therefore they have been retained for further analyses.

The values of AVE and CR are stated underneath in the Table 1.

**Table 1: Factor Loadings, Cronbach's alpha, Composite Reliability, AVE**

Variables	Items	Loadings	Alpha	CR	AVE				
<b>Organizational Performance</b>	OP2	0.812	0.862	0.893	0.511				
	OP3	0.643							
	OP4	0.724							
	OP5	0.688							
	OP7	0.669							
	OP8	0.643							
	OP9	0.722							
	OP10	0.799							
	<b>Organizational Support</b>	OS2				0.615	0.772	0.844	0.521
		OS3				0.712			
OS4		0.732							
OS5		0.752							
OS6		0.787							
<b>Political Interference</b>		PI1	0.952	0.949	0.967	0.906			
	PI2	0.97							
	PI3	0.933							

Additionally, discriminant validity has also been calculated, which explains fundamentally how indicators are representing the latent constructs, moreover, how much they are different from other constructs Fornell and Larcker (1981). The fundamental argument is that the square root of AVE value for any specific construct must be greater than the relationship of that construct with other constructs in the model F. Hair Jr et al. (2014). The results of discriminant validity have presented below.

**Table 2: Discriminant Validity**

Variables	<u>OP</u>	<u>OS</u>	<u>PI</u>
OP	0.715		
OS	0.698	0.722	
PI	-0.289	-0.201	0.952

## 5. Finding and Discussion

The next step is an estimation of structural model for testing direct and moderating hypotheses. The structural model has been measured using SmartPLS3 by performing bootstrapping. The results of direct and moderating hypotheses are presented in Table 3.

**Table 3: Hypotheses Testing**

Paths	Path coefficients	Standard Deviation	T-Statistics	P-Value
PI -> OP	-0.155	0.055	2.821	0.002
PI*OS->OP	0.111	0.056	1.964	0.025

\*\*\*p<0.001, \*\*P<0.01, \*P<0.05

Table 3 presents the results of both direct and moderating hypotheses. Findings reveal that both hypotheses are significant. In direct relationship, political interference has the negative significant impact on the organizational performance at  $p<0.002$  level of significance ( $\beta = -0.155$ ,  $t = 2.821$ ,  $p = 0.002$ ). While moderating hypothesis is significant at  $p<0.025$  ( $\beta = 0.111$ ,  $t = 1.964$ ,  $p = 0.025$ ). Therefore, it is concluded that both hypotheses are accepted.

The results of the study demonstrate that the reason behind the poor performance of Punjab police is the interference by the politicians in the tasks, duties, and responsibilities of SHOs.

The findings of the study explain that Punjab police department is significantly influenced by the political system of Pakistan. These findings are in line with the findings of Noe and Wilk (1993), who contended that political interference in the management of an organization could be harmful for the organizational performance. Findings are not surprised as some of the leading political parties who are currently representing opposition are consistently highlighting the issue of interference of higher political authorities in the responsibilities of Punjab police (United States Institute of Peace, 2011). The Punjab police department is victimized by the politician and local political parties, which ultimately is ruining their credibility and their performance consistently declining. Similarly, a study on the local government administration of Nigeria resulted that political interference affects negatively on the performance Dang (2015) which also justifies the negative findings of the current study. In addition to this, the opinion of the study that, under normal situations politics and administration are two sides of the same coin. Politics is about making policies while the policies are implemented by the administrators. Whereas, the administrators provide advice to the politicians in the formulation of policies, it was observed that politicians interrupt and restrict in the affairs of the local government administrators.

## 6. Implication of the Study

In the current study, many insights concerning the issues related to the organizational performance of Punjab police (Pakistan) have been arisen. The current study, as to date, is one of very few studies conducted in the Pakistan and especially in the security sector to examine the effect of political interference with the moderating role of organizational support. Previous studies also demonstrated that in the field of management, very few

studies have been conducted to examine the relationship between political interference and performance in the public sector Usang and Salim (2015). While, the topic political interference remains a thoughtful challenge to both Administrative practitioners and politicians in government, while the history of the debate is well documented. Whereas, in the present study political interference is the main contribution of the study, especially in the Punjab police department. Because nobody has tested it before in the context of Pakistan.

Furthermore, this study is an effort to enlarge the boundary of the existing knowledge in the literature by examining the moderating effect of organizational support on the organizational performance using the sampling technique of PLS-SEM 3. Ultimately, this research can be used as a base for creating certain rules and policies of the Pakistan Government in practicing and applying a model of this study to enhance the development, growth, and performance of their service organizations. This study can increase the awareness of Punjab police (Pakistan) higher authorities about what capabilities and competencies they have, that can help for more development and improvement. The police department must be an independent body within the certain limits, though they can improve themselves in a better way. There should be no interference in the departmental decision, every cadre must have the right to perform their duty at their level.

## 7. Conclusion

The aim of the present study was to explain the effect of political interference on the organizational performance of Punjab police (Pakistan). Moreover, the study aimed to test the moderating effect of organizational support in the relationship between political interference and organizational performance. Empirical findings of the study have shown the negative significant effect of political interference on the performance of Punjab police. Similarly, the findings also revealed the importance of organizational support to enhance organizational performance. In addition to that, the results highlighted the prominence of the moderating role of organizational support for improving organizational performance. It is believed that Punjab police is vital law enforcement agency in Pakistan, which is responsible to provide security to the community. However, it was important to scrutinize the performance of Punjab police (Pakistan). Therefore, this study has contributed in enlightening the factors which contribute to their performance, such as; political interference and organizational support.

Future scholars who intend to carry out their research in the context of security agencies in Pakistan or more specifically in the context of Punjab police should ponder on adding other variables which can enhance organizational performance. Particularly, in the time when many foreign investors are looking for investment opportunities in Pakistan, security is the basic feature which they always look for, however, performance of these security agencies should be on higher side. Additionally, upcoming researchers might

consider qualitative study to explore the phenomenon more comprehensively by interviewing the higher authorities of security agencies. By doing that researchers may get into clearer understanding how security agencies can be more effective in fulfilling their duties and responsibilities. The scope of the study might also be enhanced by future research studies to other provinces of Pakistan for the purpose of better security condition for whole the country (Pakistan).

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## The Interaction effect of Psychological Contract Breach on the relation between Psychological Capital, Work Engagement and Burnout

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### Abstract:

This study investigates the impact of psychological capital on employee work engagement & burnout, and the interaction effect of psychological contract breach in between the relationships. Data for the study were collected from doctors (N=306), working in health care units operating in different cities of Pakistan, by using random sampling technique. All of the study hypotheses were tested through structural regression (SR) model by using AMOS. Moreover, Orthogonalization was used to test the interaction effect. As per results, all of the hypothesized relationships were supported.

**Keywords:** Psychological capital; psychological contract breach; Work engagement; Burnout.

### 1. Introduction

In today's contemporary environment, success and competitive advantage of organizations' depends on the recognition of and investment in human capital. Consequently, organizations today realizing the worth of human capital & require their employees to be accountable towards organization and with its values (Bakker,

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Schaufeli, Leiter, and Taris (2008); Luthans, Luthans, and Luthans (2004); Minervini, Meyer, and Rourke (2003)). For that reason, these days' organizations are looking for highly energetic and dedicated employees, who are capable enough to deal well with the job demands and enthusiastically takes positive actions to enhance the organization's reputation and interests.

The conception of work engagement has actually been appeared from burnout research Maslach, Schaufeli, and Leiter (2001) and both are considered as polar opposites on the continuum (Demerouti, Mostert, and Bakker (2010); Maslach and Leiter (1997)). Engagement and burnout opposite to each other: As high level of employees' engagement towards their work leads to low level of burnouts among employees and vice versa (Rothmann, Steyn, and Mostert (2005); Wilmar B Schaufeli, Salanova, González-Romá, and Bakker (2002); Wilmar B Schaufeli, Taris, and Van Rhenen (2008)). Work engagement is positive state of mind comprises of energy, involvement, and professional efficacy (Restubog, Bordia, and Tang (2006); Wilmar B Schaufeli and Bakker (2004)). Whereas, Burnout is viewed as a type of job strain consists of emotional exhaustion, Cynicism & inefficacy (Hobfoll and Shirom (2001); Maslach (1993); Maslach and Jackson (1981)).

However, today almost each and every organization think about positive as well as negative effects of these two opposite work-related outcomes (work engagement & Burnout) on the overall productivity of the organization (Bakker, Demerouti, and Sanz-Vergel (2014); Bakker and Oerlemans (2016); Leiter and Maslach (2008); Trépanier, Fernet, Austin, and Ménard (2015)), which may be the result of direct and indirect work and non-work pressures, like individual psychological strengths differences on the basis of their personality, emotional intelligence or personal attributes Alarcon, Eschleman, and Bowling (2009). A positive psychological perspective of an employees' is a source of controlling negativities of the work environment (that leads an individual towards exhaustion or burnout) and exerting their focus in a successful way towards work engagement. Likewise, employees with more positive attributes are better able to make use of their positive strengths and thus found to be more engaged with their work. (Bakker and Demerouti (2007); Malinowski and Lim (2015); Paek, Schuckert, Kim, and Lee (2015)). This positive psychological state of development of an individual is called Psychological Capital or simply refer as PsyCap, and explained by four main constructs, such as, self-efficacy, hope, resiliency and optimism Luthans, Youssef, and Avolio (2007).

Psychological contract breach is used in this study as moderator on the basis on some profuse evidences. As this important study variable has attracted numerous attentions in the field of research and considered as an inevitable feature because of its high frequency in employment relationships and important role in explaining subsequent workplace attitudes and behaviours rather than contract fulfilment. (Conway, Guest, and Trenberth (2011); Kraak, Lunardo, Herrbach, and Durrieu (2017); Zhao, Wayne,

Glibkowski, and Bravo (2007)). For instance, in today's demanding work place, managing employees' psychological contracts is an unavoidable feature that needs to begin in every employment relationship and even before the hiring of an employee that affects not only the employees, but the organization as a whole Guest (2016). Also, recent trends such as outsourcing, downsizing, and contingent work arrangements etc., have changed the traditional beliefs of employees to be in lifetime employment relationship but, instead, are responsible for increasing their own employability (Bains (2015); Herriot and Pemberton (1995)). Especially in the country like Pakistan, where health care system is too inadequate & expensive, this troubling situation needs continuous and utmost commitment and engagement of Pakistani doctors towards their line of work. As this highly demanding profession puts pressure on health institutions and organizations to attract, motivate and retain their employees by fulfilling certain contracts at their end. In other words, by adding psychological contract breach as a moderator in this study, this is to be investigated that whether the Pakistani doctor's level of temperament and commitment towards their work would be affected up to some or great extent when their certain psychological contracts remained unfulfilled by their organizations where they are working. Therefore, the present study attempts to investigate this widespread relation of PsyCap with work engagement and burnout from the perspective of psychological contract breach, to have a look at, how much of the outcome variables of this study are affected because of its moderating effect.

## 2. Theoretical Framework and Hypothesis

In recent times, a number of studies have analysed the impact of personal resources on employee work engagement (Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007), 2009)). Such positive or personal resources are coming under the realm of PsyCap (Luthans (2002); Luthans et al. (2004); Luthans et al. (2007)). Besides, numerous researches have suggested a direct effect of PsyCap with employee work engagement too (Hodges (2010); Mauno, Kinnunen, and Ruokolainen (2007); Ouweneel, Le Blanc, Schaufeli, and van Wijhe (2012); Sweetman & Luthans, 2010). Wilmar B Schaufeli and Bakker (2004), have observed that, in spite of long working hours and high job demands, some individuals do not show exhaustion. Instead, they found that individuals feel pleasure to work for long hours so as to deal with their high job demands. As per Seligman & Coyle-Shapiro and Kessler (2000), from perspective of Positive Psychology, those particular individuals are depicted as engaged in their work. In addition to these, numerous studies have also focused on positive psychological strengths or personal resources as antecedents of work engagement (Stajkovic and Luthans (1998); Sweetman and Luthans (2010); Xanthopoulou et al. (2009); Youssef and Luthans (2007)).

**H1:** *Psychological Capital is positively related to work engagement.*

Burnout is defined by different research scholars as "a common emotional fatigue and a psychological syndrome of cynicism, exhaustion, and inefficacy that emits from

endured work stress” (Maslach (1993); Maslach and Jackson (1981); Maslach et al. (2001)). Burnout leads to many negative outcomes like low performance towards job, high turnover, and high health care costs (Halbesleben and Buckley (2004); Shirom (2003); Wang, Hall, and Rahimi (2015)). A number of studies (Ding et al. (2015); Luthans, Avolio, Walumbwa, and Li (2005); Peng et al. (2013)) have looked into the relationship between the PsyCap and burnout. Researchers opine that the certain positive psychological factors effectively reduce the chances of burnout (Ding et al. (2015); Luthans et al. (2004); Wilmar B Schaufeli and Bakker (2004)). Moreover, as per (Kan and Yu (2016); Laschinger and Fida (2014); Liu, Hu, Wang, Sui, and Ma (2013); Rego, Sousa, Marques, and e Cunha (2012)) PsyCap may perhaps reduce the occurrences of work related stressors, anxiety, burnout and turnover among employees. Besides, higher levels of PsyCap attributes among employees endow them with the ability to deal well with the workplace stressors and reduce the chances of burnout Avey, Luthans, and Jensen (2009). Moreover, at one hand, where higher level of PsyCap attributes of individuals’ promotes their engagement towards their jobs Hodges (2010), on the other hand, this may also help decrease prevalence of burnout inside them (Tong, Wang, and Peng (2015); Wan, Herui, and Ke (2014)).

**H2:** *Psychological Capital is negatively related to Burnout.*

Psychological contracts have been shown to influence key organizational outcomes. For instance, sometimes organizations have fully met expectations of their employees or sometimes they fail to provide them with promised returns, thus it may influence differently on significance of outcomes (Robinson (1996)). Numerous researchers have analysed the detrimental impact of psychological contract breach on workplace relationships (Conway and Briner (2002); Parzefall and Hakanen (2010)). When employees having positive psychological strengths perceived un-fulfilment of certain obligations or promises in their employment contract implied by their employers then this particular situation becomes the source of creating perceptions of breach among them (Coyle-Shapiro and Kessler (2000); Morrison and Robinson (1997); Restubog et al. (2006); Robinson (1996); Rousseau (1995)), that ultimately leads to feelings of betrayal (Robinson (1996); Robinson and Rousseau (1994)), and that negative attitude & behaviour eventually results in disloyalty & unfaithfulness, lack of trust and commitment, poor performance, high turnover Robinson and Rousseau (1994); cut back on constructive behaviours, for example, low citizenship behaviour and in-role performance (Robinson (1996); Robinson and Morrison (1995)); as well as lower engagement and higher burnout towards their work Chambel and Oliveira-Cruz (2010). While on experiencing breach, employees see themselves in a condition of inequity & they reinstate equity by an emotionally strong response in the form of lower work engagement, Parzefall and Hakanen (2010) & higher burnout Jamil, Raja, and Darr (2013). Some researchers have revealed that contract breach threatens sense of control from their environment & that ultimately becomes source of their burnout (Gakovic and Tetrick (2003); Topa and Morales (2005)). On the other hand, employees

having positive psychological strengths & whose all promises are fulfilled & expectations are met by their employer are found to be more engaged and less exhausted toward their work Bal, Kooij, and De Jong (2013).

**H3a:** *The positive relation between psychological capital and work engagement will be moderated by psychological contract breach, such as the positive relationship between psychological capital & work engagement will be stronger when psychological contract breach is low and weaker when psychological contract breach is high.*

**H3b:** *The negative relation between psychological capital and burnout will be moderated by psychological contract breach, such as the negative relationship between psychological capital & burnout will be stronger when psychological contract breach is low and weaker when psychological contract breach is high.*

### Research Model

The research model shown in figure 1 exhibits the predictor variable i.e., political interference that predicts organizational performance through moderating role of organizational support.

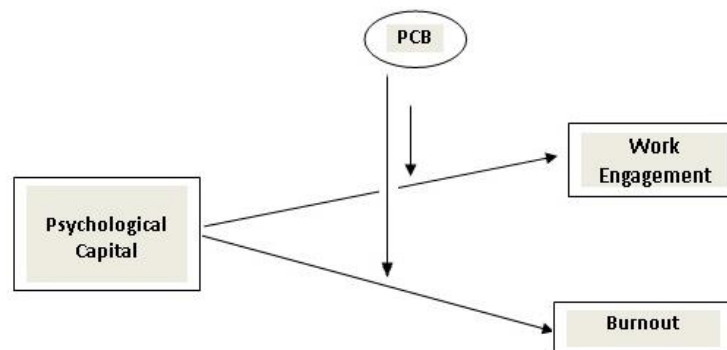


Figure: 1 - Hypothesized Model

## 3. Methodology

### 3.1. Sample

Data were collected through survey method from more than 300 doctors working in different health care units (hospitals, medical colleges, etc.) operating in different cities of Sindh such as, Khairpur Sukkur, Larkana, Hyderabad and Karachi, by using random sampling technique. The reason behind choosing this sample is that, this profession requires more interpersonal as well as emotional demands than any other profession. Participants varied in their level of gender, qualification, age and years of experience. Both, male and female doctors were participated in the study with a response rate of 72% & 28%. Around 37% of the participants involved in the study were between the ages of

36 - 45 and 47% of the participants had been working experience between 5 - 15 years.

### 3.2. Measure

For data collection, 5-point Likert scale, starting from never (1) to always (5) was used. Psychological Capital (PsyCap) was assessed using 24-items scale Luthans et al. (2007). Sample items were, “I feel confident contributing to discussions about the company’s strategy” & “I always look on the bright side of things regarding my job”. Robinson and Morrison (2000) 5-item global scale was used to measure Psychological contract breach (PCB). One of the example item was, “I have not received everything promised to me in exchange for my contributions”. Work engagement (WE) was assessed with the Utrecht Work Engagement Scale (UWES), by Wilmar B Schaufeli et al. (2002). Sample item was “When I get up in the morning, I feel like going to work”. Burnout was measured using the Maslach Burnout Inventory MBI Maslachi, Jackson, and Leiter (1996). The total scale consists of 16 items. Sample item was: “I feel emotionally drained from my work”. Control Variables used in the study were Sex, qualification, age & experience.

### 4. Data Analysis

Statistical Package for the Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) version 18 were used for screening of data and testing of hypothesis respectively. Initially data screening such as missing values, aberrant values, multivariate outliers’ detection and normality test were performed before calculating the reliability and validity of the scale and further statistical analysis such as structural regression and orthogonalization. Descriptive statistics and correlation of the all variables studied in this study are given in table 1.

**Table 1: Descriptive Statistics and correlations Summary**

	<u>Mean</u>	<u>SD</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
1.Sex	NA	NA								
2.Edu	NA	NA	-							
			.264**							
3.Age	2.43	.824	-							
			.120*	.107						
4.Exp	2.24	.736	-							
			.139*	.071	.672**					
5.PsyCap	2.6042	.70532	-.052	-.035	-.027	-.010				
6.PCB	2.9322	.99697	.006	.033	.074	.087	-.370**			
7.WE	2.7636	.78304	-.012	-.073	-.046	-.074	.629**			
								-.475**		
8.BO	3.1098	.85129	-.013	.008	.099	.032	-.140*	-.023	-.087	

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

NA= Not Applicable; Edu = Education; Exp = Experience; PsyCap = Psychological Capital ; PCB = psychological contract breach; WE = Work engagement; BO = Burnout

Confirmatory Factor Analysis (CFA) was used to check the validity of measures and for model adequacy various Fit indices (Byrne, 2001) were used (Such as, CMIN/df, Root-Mean Square Error of Approximation (RMSEA), Tucker Lewis Index (TLI) and Comparative Fit Index (CFI)). Initially, the model fit was relatively poor (CMIN/df = 2.12; CFI = 0.72; TLI = 0.71, RMSEA = 0.05). After removing the low factor loadings items (< 0.5), the second model was tested, where model fit statistics were considerably improved (CMIN/df = 1.478, CFI = 0.943; TLI = 0.939, RMSEA = 0.040). The suitability of the proposed measurement model was analysed by two alternative measurement models Bentler and Bonett (1980). Both alternative models showed poor fit to data. Therefore, actual model was preferred instead of any alternative model because of its superior fit. Moreover, validities (convergent and discriminant) for all the scales were calculated (Hair et al., (2010)). The results (Table 2) established that the statistical criteria (CR > .70; AVE > .50; AVE > MSV & AVE > ASV) of all the measures were fulfilled.

**Table 2: Convergent and Discriminant Validities**

	<u>CR</u>	<u>AVE</u>	<u>MSV</u>	<u>ASV</u>
<b>WE</b>	0.816	0.51	0.082	0.019
<b>BO</b>	0.917	0.616	0.025	0.009
<b>PCB</b>	0.702	0.53	0.065	0.019
<b>PsyCap</b>	0.845	0.579	0.022	0.012

PsyCap = Psychological Capital ; PCB = psychological contract breach; WE = Work engagement; BO = Burnout

Most of the studies conducted on PCB have used SEM only for CFA and tested hypothesis by using multiple regression (Kiewitz, Restubog, Zagencyk, and Hochwarter (2009); Zagencyk, Gibney, Few, and Scott (2011)), but this study tested hypothesis through structural regression by using AMOS 18. The main advantage of using structural regression through SEM by using AMOS is that it has the capability to discourse the presence of measurement error with in the statistical model which others approached does not consider.

The main disadvantage of some software other than AMOS is not accommodating the measurement errors in determining the causal relationships such as direct, indirect and interaction effects. It is troublesome for testing the interaction effects in the regression

models Little, Bovaird, and Widaman (2006). Therefore, it is more reliable statistically to test the interaction effect through latest structural model rather than doing it through regression models. In one study, Little et al. (2006) used orthogonalization approach and found that results of latent variable interaction in SEM is better fit to the data. Thus, researcher used orthogonalization approach and created orthogonalized indicators for the latent interaction terms  $Psycap \times PCB$  (PsyCap was independent variable and PCB was moderator).

Hypothesis 1 of the current study states that Psychological Capital is positively related to work engagement. The results in table 3 show that independent variable psychological capital has positive significant effect on dependent variable work engagement (unstandardized  $\beta = 0.438$ ; S.E = 0.055;  $p = 0.000$ ). Therefore, Hypothesis 1 is supported. Hypothesis 2 states that positive Psychological capital is negatively related to burnout. The results in table 03 indicate that psychological capital has negative significant effect on dependent variable burnout (unstandardized  $\beta = -0.201$ ; S.E = 0.072;  $p = 0.005$ ). Therefore, Hypothesis 2 is supported.

**Table 3: SR Model Results**

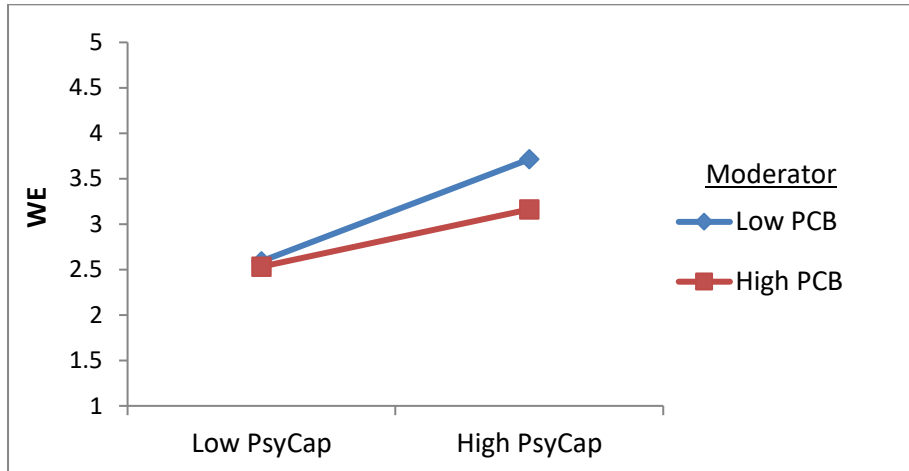
Paths	Path coefficients	Standard Deviation	T-Statistics	P-Value
PI -> OP	-0.155	0.055	2.821	0.002
PI*OS->OP	0.111	0.056	1.964	0.025

CI = Confidence Intervals (for 5000 bootstrap samples); P.E = Point of Estimate; S.E = Standard Error; PsyCap = Psychological Capital; PCB = psychological contract breach; WE = Work engagement; BO = Burnout

Hypothesis 3a of the study states that the relation between Positive Psychological Capital and work engagement (WE) will be moderated by PCB, such as the relationship between positive psychological capital & WE will be stronger when PCB is low and weaker when PCB is high.

The results presented in table 3 show that the latent interaction term of Psychological Capital (independent variable) and PCB (moderator) had significant negative effects on work engagement (unstandardized  $\beta = -0.123$ ; S.E = 0.046;  $p = 0.007$ ). Thus, the H3a, moderating effect of the PCB on the relationship between Psychological Capital and work engagement was supported.

Figure 2 presented graphical evidence in support of H3a. The slope for the relationship between Psychological Capital and work engagement moderated by PCB shows that work engagement is at its high level at the point when Psychological Capital is at high level and the moderator variable PCB is also at the low level as compared to when the independent variable is at the same position and moderator variable PCB is at the high level.



**Figure: 2 Interaction effects of PCB on WE**

Hypothesis 3b of the study states that The Positive relation between Positive Psychological Capital constructs and Burnout (BO) will be moderated by PCB, such as the negative relationship between positive psychological capital & BO will be stronger when PCB is low and weaker when PCB is high

The results presented in table 3 show that the latent interaction term of Psychological Capital (independent variable) and PCB (moderator) had significant negative effects on burnout (unstandardized  $\beta = 0.72$ ; S.E = 0.042;  $p = 0.001$ ). Thus, the H3b, moderating effect of the PCB on the relationship between Psychological Capital and burnout was supported.

Figure 3 presents the graphical evidence in support of H3b. The slope for the relationship between Psychological Capital and burnout moderated by PCB shows that relationship between Psychological Capital and burnout is strong when PCB is at the lowest level as compared to when PCB is at the highest level.

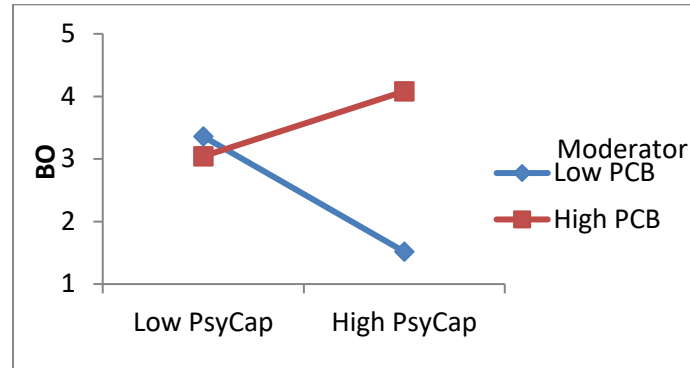


Figure: 3 Interaction effects of PCB on BO

## 5. Discussion of Results

This study investigated the impact of PsyCap on work engagement and burnout directly, as well as indirectly by using psychological contract breach as a moderator. Several researches hypothesize that PsyCap is positively related to work engagement Avey, Wernsing, and Luthans (2008), and negatively to burnout W Bakker Schaufeli and Bakker (2001). Also, as per results of this study, hypothesis 1 is supported, that is, psychological capital (PsyCap) is positively related with work engagement (WE). So far, number of studies have analysed the positive effect of PsyCap with work engagement (Hodges (2010); Wilmar B Schaufeli and Bakker (2004); Sweetman and Luthans (2010)) and found that in spite of long working hours and high job demands, employees with positive strengths and attributes do not show exhaustion. Instead, they shows high level of commitment and feel pleasure to work for long hours, and that results in the form of improved individual and organizational performance. As in the current study, the predictive role of PsyCap with doctors' engagement towards their work was investigated & it was found that PsyCap can make a significant positive effect on their work engagement (See Table 3). PsyCap may increase doctors' positive strengths and capacities in terms of their self-efficacy or confidence, hope, optimism and resiliency which ultimately results in the form of their increased level of motivation and commitment in spite of their long working hours and high job demands, and hence, they found to be more engaged towards their work. Hypothesis 2, that is, PsyCap has negative association with burnout is also supported (See Table 3). Also various studies have analysed this relationship (Ding et al. (2015); Luthans et al. (2005); Tong et al. (2015)) and found that individuals' psychological strengths reduces the chances of burnout. Burnout may leads to many negative outcomes like, negative work attitude, low job performance, satisfaction, and high turnover intentions (Halbesleben and Buckley (2004); Maslach and Leiter (1997); Shirom (2003); Wang et al. (2015)), but because of having PsyCap capacities, especially in the case of doctors, the prevalence of these negative outcomes decline to a great extent.

Hypothesis 3a & 3b explicates the relation between PsyCap with work engagement &

burnout and the interacting effect of psychological contract breach in between the relationships. As per the Hypothesis 3a, the positive relationship between PsyCap with work engagement is stronger when psychological contract breach is low and weaker when psychological contract breach is high, and in the same way the negative relation between PsyCap and burnout is stronger when psychological contract breach is low and weaker when psychological contract breach is high. The results of this study provides evidence that more the doctors' perceive breaches in their contracts, more they perceive feelings of burnout (anxiety, depression, frustration, etc.) and less they engage with their work. Moreover, Kozlowski, Chao, Smith, and Hedlund (1993) and Zeitlin (1995) argued that psychological contract breaches or violations have negative effects on employees. Individuals who are experiencing continuous breaches in their contracts (when their certain implicit and explicit promises made by their employer remain unfulfilled) more likely to perceive feelings of burnout and less likely to be engaged in their work (Chambel and Oliveira-Cruz (2010); Parzefall and Hakanen (2010); Topa and Morales (2005)), as they see themselves in a state of inequity. But when organizations have fully met expectations of their employees, thus it may influence differently on significance of outcomes. For instance, doctors having psychological strengths when perceive fulfilment of certain obligations or promises implied by their employers then this particular situation reduces development of breach perceptions among them, and their engagement and commitment towards their work would be high and feelings of burnout would be less Bal et al. (2013).

## **6. Managerial Implications**

These days, psychological capital has found to be an imperative feature of the organizations and organizations consecutively find ways to make use of this developmental nature of PsyCap to enhance positive strengths and capacities of their employees in terms of self-efficacy or confidence, hope, optimism and resiliency. Nevertheless, employees' plays greater role in building their positive image, profitability. Also, since last many years, matter of employee work engagement has remained inevitable, that has captured not the interest of academicians and practitioners only, but its importance is also recognized by employers under their business domain too. Employees with positive strengths and attributes are better able to make use of their positive strengths and thus found to be more engaged with their work that results in the form of improved individual and organizational performance, increase organizational productivity, high employee retention and low turnover etc. Burnout on the other hand has become one of the serious concerns in various professional fields in relation to its negative & harmful consequences on the personal and professional life of employee and on the organization, simultaneously. These negative consequences may result in lower employee morale; increased absenteeism and turnover and lower quality and quantity of job performance. PsyCap, because of its positive influence on mind of employee, can better help them to deal with the perceptions of anxiety and depression to a great extent, that are the causes of burnout. Apart from these, Managers must take care of the

psychological contracts of employment relationships, if any. Undoubtedly, every employment relationship begins with some type of contracts (explicit and implicit) between the employer and employee and sometimes even before the hiring of an employee that affects not only the employees, but the organization as a whole. Unfulfilling of any of these explicit or implicit contracts made with employee, resulting in development of contract breach perceptions among employees. Like burnout, psychological contract breach again has negative consequences on the employment relationship from the side of employee in the form of lack of commitment, withdrawal, turnover and burnout etc. In fact, Managers should constantly engage in the activities connected with development of employees' PsyCap attributes by assisting organizations in developing such practices that work best for the development of employees' Such as, by arranging appropriate trainings, workshops, and other career development programme, by empowering them with decision making abilities, etc., and that also enhance their level of confidence and positive view towards organization. Besides, these positive initiatives may also facilitate more engagement and less incidences of burnout among employees.

### **7. Limitations & Future Directions**

This study encompasses several limitations which can provide room for future researchers to work on. At the outset, cross-sectional research design is used instead of longitudinal. In addition, the sample size used for this study is limited, as data is collected from few cities of Pakistan only. Hence, researchers in future can also investigate the same model through a longitudinal study and with the larger samples by including different cultures & contexts such as, nurses, academicians, and other service organizations etc. Apart from these, other imperative limitation of the study is that the impact of PsyCap through its different dimensions (Self efficacy, hope, resiliency and optimism) has not been investigated separately. Besides, the different dimensions of work engagement (vigour, dedication & absorption) and burnout (emotional exhaustion, cynicism & Inefficacy) were not investigated separately. Therefore, future researchers can check the effect overall PsyCap or through its various constructs, with different dimensions of work engagement & burnout separately.

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## Organization Justice and Organization Citizenship Behaviour: Employee Trust Acting as Mediator

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### Abstract:

Justice in the organizations mostly focused on two perspectives, fairness of results and fairness of techniques is used to determine that outcomes and the perspectives were called as distributive justice and procedural justice respectively. The organizational justice covers everything on versatile concept from system of payment to treatment of your boss. Researchers of organizational behaviour recognized four types of organizational justice that is procedural, distributive, interactional and informational justice. Procedural justice perceptions considered to be one of the most crucial variables of organizational justice perceptions. The effect of different level of organizational justice on organizational citizenship behaviour is a widespread researched topic and explains the importance of organizational justice in an organization. The purpose of this quantitative study is to investigate the impact of employee trust on the relationship between organizational justice and organizational citizenship behaviour in the perspective of call centre industry in Pakistan. The sample size covered 160 employees of different call centres of Islamabad. A total of 38 questions were asked based on a 5 point Likert scale responses. For accurate data processing, SPSS Statistics software package is used for statistical analysis. Regression is used to test the hypothesis. The results show that there is a positive relationship between Organizational Justice and OCB (Accepted), there is a positive relationship between Procedural Justice and OCB (Rejected), there is a positive relationship between Distributional Justice and OCB (Accepted), there is a positive relationship between Interactional Justice and OCB (Accepted) and employee trust does not mediate the associations between Organizational Justice and OCB, which is a positive effects on OCB.

**Keywords:** Organizational citizenship behaviour, Procedural Justice, Distributive Justice, Interactional justice, Employee trust.

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## 1. Introduction

Organizational citizenship behaviour (OCB) has been studied since the late 1970s and the concept has been gaining momentum in diverse areas from personality/social psychological perspective to an organizational setting. Organ (1988), defined as an individual, voluntary and arbitrary behaviour not being identified directly and evidenced by the formal rewarding system and, generally, it improves the effective operation of the organization. Adam's theory of the fairness Adams (1965) emphasizes that the people always assess themselves in the context of the area and in equivalence alongside others. The thoughts of the fairness and fairness in the organizational settings denote organizational justice.

The word "justice" in the various environments carries the different consequences for individuals and groups. The concept of the justice in the organizations originates from the discussions related to the social psychology of relationship to distributive justice. Organizational justice represents the person and the cluster's observations of the justice of conducting acknowledged from establishments and their interactive responses to such opinions James (1993).

Procedural justice refers to the observed fairness of the procedures used to conclude result circulations or distributions Colquitt, Conlon, Wesson, Porter, and Ng (2001). While procedural justice can be raised through numerous rules, such as uniformity rule, bias-suppression regulation, accurateness rule, correct ability regulation, the representativeness rule, and ethicality rule, research had used regularly all or some of these.

Trust is a vital constituent of interpersonal relations; in fact, the existence of a social group may be topic to on the members' willingness to exercise trust with one another. The capacity to introduction a sense of self-worth, to have the esteem of co-workers and to like healthy social relatives is secure in trust Hodson (2002).

Organization justice has been shown to be related to employee attitudes as well as trust in the organization. It has been found that organizational justice was an important predictor of trust. They drawing on 28 in-depth interviews found that a general perception of organization justice had some influence on feelings of trust Aryee, Budhwar, and Chen (2002).

Various researchers have been led on administrative fairness in the US Greenberg (2002). Yet, very less number of readings has been conducted in Asian perspective Loi, Hang-Yue, and Foley (2006). This means that the miracle should be verified in supplementary sophistications McFarlin and Sweeney (1992). Greenberg (2002), clashed that leading Cross-cultural studies in the span of organizational fairness will develop new visions into the phenomenon of justice and also theory will be tested in generalizability, and better theories will be developed. By assuming that our current

understanding of workplace fairness is universal, we overlook the deep cultural differences that can exist between people of the different nation. Therefore, another main reason behind conducting this study is to determine how four factor model of organizational justice influence the call centre industry in Pakistan.

## **2. Literature Review**

### **2.1. The term Organizational Citizenship Behaviour (OCB)**

The term organizational citizenship behaviour was for the first time used by Smith, Organ, and Near (1983), over a decade ago. They described the OCB as a behaviour of the organization that creates willingness of the employees to go beyond the required capabilities. Organizational citizenship behaviour has been considered to be one of the most important factors influencing organizational effectiveness Organ, Podsakoff, and MacKenzie (2005).

Organizational citizenship behaviour has undergone delicate definitional revisions since the term was coined in the late 1980s, but the construct remains the same at its core. OCB refers to anything that employees choose to do and may not always be directly and formally known or rewarded by the company, through salary increases or promotions, for example, though of course OCB may be replicated in favourable supervisor and co-worker ratings, or better performance reviews. In this way, it can ease future reward gain ultimately. Finally, and critically, OCB must 'promote the efficient execution of the organization Organ (1988).

Organ (1988), suggested that high levels of OCB should lead to the effective association and help to carry new capitals into the association. Organ (1988) argued that OCB has five main aspects that are Courtesy: to respect others, Altruism, it means that to help the colleagues at workplace, Sportsmanship means to bear in unfavourable conditions and showing a positive reaction without giving the chance of complaints, Civic virtue to make the employee dimension of organization good-well and finally Conscientiousness means performing direct role for organization success. OCB has main two types; OCBI the employees' attitude that gives direct benefits to them and as well as advantageous for the organization. Whereas OCBO the behaviours which thoroughly favour the organization Williams and Anderson (1991).

In 1930 the OCB remained an area of interest of a wide range of studies. The degree of willingness to get work from employees was initially introduced by (OB) by Chester Barnard. Organizational citizenship behaviours are such behaviours which neither worked for rewarding the employees nor the forced the employees to exhibit such behaviours. Moreover, OCB only provides with the overall effectiveness of the organization is the behaviour that provides with lots of effectiveness to the organization, but doesn't favour the employees Aslam and Sadaqat (2011).

It has been founded by a meta-analysis that distributive justice is a central forecaster of

OCB Colquitt et al. (2001). In the perspective of the social exchange process, when employees realize fair treatment and believe in managers, they perform more than their capacities for the betterment of the organization even that aren't included in their job descriptions Deluga (1994).

## **2.2. Organizational Justice**

Justice is a topic of philosophical research from the age of Plato and Socrates (Ryan, 1993). The word justice means "righteousness". Justice in the organizations, mostly focused on two perspectives, fairness of the results and fairness of techniques is used to determine that outcomes and these perceptive were called as distributive justice and procedural justice respectively Leventhal (1976). Organizational justice theory Greenberg (1987) emphasizes on positive attitudes in the organization, by categorizing employees' opinions and feelings regarding their treatment compare to others within the organization.

Organizational justice has been appearing as the latest topic on the debate panels for long in HRM, organizational psychology, and organizational performance. Organizational justice basically clarifies the equality insights of persons or of the group and then their conduct can be detected affording the action they receive from their association. It has been studied and projected that organizational justice would be at the top in organizational performances. It has been understood that organizational justice observations were powerfully connected to organizational promise and managerial associated commitment Greenberg (1990).

Greenberg (2005), organizational justice can be defined as "the study of people's opinions of justice in organization". The organizational justice covers everything on a versatile concept of a system of payment for the treatment of your boss. Researchers of organizational behaviour recognized four types of organizational justice that are procedural, distributive, interactional and informational justice Colquitt, Greenberg, Zapata-Phelan, Greenberg, and Colquitt (2005).

The organizational justice has a positive impact on OCB. The employees that find their organization unbiased and fair in processes, distribution and information system, they are more inclined to show organizational citizenship behaviours which are helpful in the progress of an organization Aslam and Sadaqat (2011).

### **2.2.1. Procedural justice**

Employees are not only concerned about fair results, but also concerned with a fair process for the determination of their results. Procedural justice as justice issues relating to the techniques, mechanisms, and procedures employed to conclude results. This is a term used to describe the role of fairness in the workplace. Generally, they have identified two major perspectives on which justice research has typically focused: distributive justice and procedural justice Ang, Van Dyne, and Begley (2003).

Procedural justice perceptions considered to be one of the most crucial variables of organizational justice perceptions. Workers seem to be more dissatisfied when they perceive that the main hurdle is a procedure in the way of receiving their rewards for their performance. By adopting fair procedures, the negative outcomes of unfair procedures will be avoided.

Moreover, in the case of procedural injustice people did not only consider their outcomes as unfair but also reject the entire system by considering that unfair Cropanzano, Ambrose, Greenberg, and Cropanzano (2001). People's tendencies to follow company rules were found to be affected by procedural justice practices; therefore, top level officials were advised to promote procedural justice, so it would be easy for employees to follow company rules Greenberg and Baron (2008). An instrumental model by Thibaut and Walker (1978) proposed that procedural justice resulted in more controllable and predictable outcomes so it was highly valued.

### ***2.2.2. Distributive Justice***

Distributive justice means fairness in the distribution of rewards and benefits. Different researchers defined this dimension of organizational justice differently. Distributive justice can be defined that the individual's opinion on whether the gains they earned are distributed fairly. Individuals comparing their outcome to their previous outcomes or to the outcomes of the others by making judgments on the appropriateness of justice distributive Cohen-Charash and Spector (2001).

According to the Greenberg and Baron (2008), distributive fairness means "the form of organizational justice that emphasizes on people's views that they have received fair amounts of valued work-related outcomes (e.g. pay, recognition, etc.)". The effect of different level of organizational justice of organizational citizenship behaviour is a widespread researched topic and explains the importance of organizational justice in an organization.

### ***2.2.3. Interactional Justice***

Interactional fairness is a vital characteristic of prosperous organizations; it means that workers notice that they are preserved justly by their bosses. It is also connected to the proper presentation of the proper decision-making process. This kind of organizational fairness is described as "Interpersonal justice means people's perceptions of the fairness of the manner in which they are treated by others Greenberg and Baron (2008).

The theory of interaction justice has been established and expanded repeatedly along with the expansion of the theory of organizational justice. Adams first puts onward the fairness theory, signifying that when observing the justice of the outcomes, persons would work out the ratio of their input and output and compare their distributive outcomes with theirs (internal and external) and others Adams (1965).

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### **2.3. Employee Trust**

The concept of trust has been studied in various fields of social sciences. Trust is observed as a direction apparatus dropping social compound in sociology. In economics, trust is preserved as financial oil, dropping the business cost among conversation gatherings. In organizational science, trust has the result of leading risk-taking in interpersonal relations. It has also clarified that a high level of trust between labour and management is a significant ancestor of a supportive association design and plays a vital role in the integrative negotiation and joint problem solving Fox (1974).

Furthermore, research has concentrated on various particular aspects of trust, including initial trust formation, the relationship between a Trust or and a Trustee Zand (1996).

Trust is a vital constituent of interpersonal relations; in fact, the existence of a social group may be topical to on the members' willingness to exercise trust with one another. The capacity to introduce a sense of self-worth, to have the esteem of co-workers and to like healthy social relatives is secured in a trust Hodson (2002).

Aryee et al. (2002), observed the potential facilitating effect of the trust in workers on the connection between organizational justice and worker work performances among a sample of Indian labours. They recognized three magnitudes of organizational justice (procedural, distributive and interactive) of trust in workers. These, in turn, differentiate connected to worker work consequences. They found incomplete provision for their proposals in the wisdom that the trust would completely, but in a dissimilar way arbitrate the association between the organizational justice and the work performances.

The mediating role of trust is based on the social exchange theory. The exchange is perhaps the most basic form of communal interaction, focusing the theoretical gap, e.g., subjective cost-benefit analysis and comparison of alternatives. Social exchange is grounded on the norm of joint benefit, namely we help those who help us Gouldner (1960).

Thus, Lewicki, Wiethoff, Tomlinson, Greenberg, and Colquitt (2005) delineated various studies that confirm that belief in other people and organizations grows along with fair treatment, these studies have shown that belief is a consequence of distributive, procedural and interactional justice.

Organizational fairness arose in belief in employees' that in turn inspires them to display more OCBs. The results of fairness and belief in supervisor on the OCB are examined on the academicians between public universities in Turkey. This displays that belief in supervisor replaced as a mediator in the connection of organizational fairness and OCB Aryee et al. (2002).

Thus, consenting that OCB is included between such contributions, it is counselled that the extent of that belief is an indicator of communal transactions; belief will arbitrate the connection amid organizational fairness and OCB. Therefore, with the aid of works we can say that organizational fairness will have to manage the result of organizational citizenship behaviour as belief is arbitrating between the two variables.

### 3. Research Framework

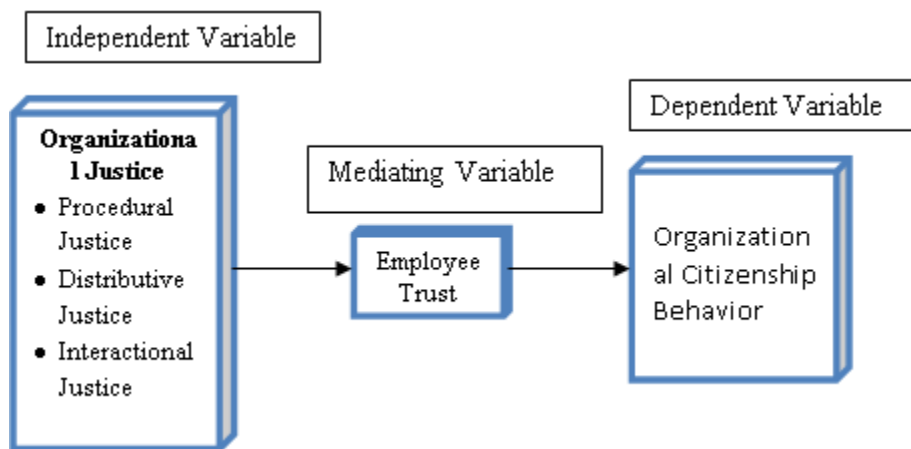


Figure: 1 - Theoretical Framework

#### 3.1. Research Hypothesis

- H1: Organizational Justice has positive impacts on OCB.
- H 2: Procedural Justice has positive impacts on OCB.
- H 3: Distributional Justice has positive impacts on OCB.
- H 4: Interactional Justice has positive impacts on OCB.
- H 5: Employee trust mediates the associations between Organizational Justice and OCB, which are positive impacts on OCB.

### 4. Research Methodology

#### 4.1. Research Instrument

Quantitative methodology is adopted for the research, whereas method utilized is the survey through a structured and closed ended Questionnaire. The main reason for the use of survey research is the successful application of survey research in business research. This study resolve is an empirical analysis to see the effects of organizational

justice on organizational citizenship behaviour in the Call centre industry in Pakistan. The reason for selecting the call centre industry is because having great potential and little research work has been done in this industry. The mediating role of the employee trust was also analysed. The scale is based on 5 point Likert scale ranging from strongly disagree (1) to strongly agree (5). A total of 38 items were used to assess organization citizenship behaviour, distributive justice, procedural justice, interactional justice and employee trust.

**4.2. Sample and Data Collection**

The research aimed to determine the effects of organizational justice on organizational citizenship behaviour: the mediating role of employee trust. The total number of 160 questionnaires were distributed among the employees in which 100 were returned and 17 were eliminated due to excess missing data, 25 were empty because they refused to fill it and 18 was not filled correctly. Therefore, for the present research the size of sample become 100 for hypotheses testing. The research was cross-sectional because the data were undertaken randomly from a various call centre in Islamabad at one point of time.

**4.3. Data Analysis**

For proper data processing, entry and to find the results as output, SPSS (statistical package for social sciences) version 16.0 is the tool which is used in this research.

**4.4. Descriptive Statistics**

Table No.1 demonstrates the mean values for the respondents of this study. Out of which the mean value for the employment period stands to 1.9600 illustrating that on average less than 1 year employees are more than the rest ones. The mean value for the qualification stands 1.9900 illustrating that on average the study included Bachelors’ respondents than other groups. Also, the mean value for the native language stands to 2.4400 illustrating that on average the study included Urdu speaking respondents than the rest. The mean value for the marital status stands to 1.7200 illustrating that on average the study included unmarried respondents than the married employees. The mean value for the gender stands to 1.3100 illustrating that on average the study included male respondents than the female employees. The mean value for the age stands to 1.5300 illustrating that on average the study included respondents between 20-30 years than other employees.

**Table 1: Mean**

Demographic Profile	Mean	Std. Deviation	Range	Minimum	Maximum
Employment Period	1.96	1.00423	3	1	4
Qualification	1.99	0.8226	3	1	4
Native Language	2.44	0.96735	4	1	5
Marital Status	1.72	0.56995	1	1	4

Gender	1.31	0.46482	1	1	2
Age	1.53	0.79715	4	1	5

#### 4.5. Demographic Analysis

This study included 100 respondents of call centre industry of Islamabad, Pakistan. In these respondents 41 (41%) were less than 1-year employment period, 33 (33%) were 1-2year, 15 (15%) were a 2-3 year and 11 (11%) were more than 3 years. Qualification shows that 29 (29%) of the respondents lies in Intermediate level education. Bachelors' level employees were 48 (48%), Master level were 18 (18%) and the remaining 5 (5%) were another level of education. Native Languages show that 16 (16%) of the respondents were English speaking. 39 (39%) of the respondents were Urdu speaking, 39 (39%) were Punjabi, 9 (9%) Pashto and other were 3 (3%). Marital status shows that 32 (32%) of the employees were married, 66 (66%) were unmarried and the rest 4 (4%) were other. Gender shows that 69 (69%) of the employees were male and 31 (31%) were female. A maximum number of respondents were between the ages of 20-30 years which makes them about 62 (62%) of the respondents. 26 (26%) of the respondents were from 30-40 years. 10 (10%) of the respondent's lies between the age of 40-50 years, 1 (1%) of the respondents were above the age of 50 and 1 (1%) were others of the total respondents.

### 5. Result and Discussion

**H1:** *Organizational Justice has positive impacts on OCB (Accepted)*

**Table 2: Model Summary**

Model 1	<u>R</u>	<u>R Square</u>	<u>Adjusted Square</u>	<u>R</u>	<u>Std. Error of the Estimate</u>
1	0.349	0.121	0.113		4.25349

The table above shows the relationship between organizational justice and organization citizenship behaviour. This table also shows the 1units increase in organizational justice causes 34 units increase in organization citizenship behaviour.

**Table 3: ANOVA**

Model 1	<u>Sum of Squares</u>	<u>Df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sign.</u>
1 Regression	245.156	1	245.156	13.55	0
Residual	1773.034	98	18.092		
Total	2018.19	99			

a. Predictor: (Constant), OJ      b. Dependent Variable: OCB

This ANOVA Table tells the fitness of model. In the table, the regression sum of square value is less than the residual sum of the square but the value of F is 13.550 and significant which tells model has achieved a fit to explain the relationship.

**Table 4: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	17.76	2.436		7.29	0
OJ	0.201	0.055	0.349	3.681	0

Dependent Variable: OCB

**B** is the regression coefficient. It tells the change brought in a direct variable (DV) when one unit of the indirect variable is changed. As per the table above the value of B is .201, which indicates that if organizational justice is increased by one unit it brings 17.760 units change in OCB. The value of **t** is 7.290 which are greater than 2 and the significance value is below the required range of 0.05 so it is confirmed that there is a significant relationship between organizational justice and organization citizenship behaviour.

**H2: Procedural Justice has positive impacts on OCB. (Rejected)**

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.255	0.065	0.055	4.38804

a. Predictors: (Constant), PJ

The table above shows the relationship between procedural justice and organization citizenship behaviour. This table also shows the 1% increase in procedural justice causes 25% increase in organization citizenship behaviour.

**Table 6: ANOVA Table**

Model 1	Sum of Squares	Df	Mean Square	F	Sign.
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1					
Regression	131.206	1	131.206	6.814	0.01
Residual	1886.984	98	19.255		
Total	2018.19	99			

a. Predictor: (Constant), PJ      b. Dependent Variable: OCB

This ANOVA Table tells the fitness of model. In the table, the regression sum of square value is less than the residual sum of the square but the value of F is 6.814 and insignificant which tells model has not fit to explain the relationship.

**H3:** *Distributional Justice has positive impacts on OCB. (Accepted)*

**Table 7: Model Summary**

Model 1	<u>R</u>	<u>R Square</u>	<u>Adjusted R Square</u>	<u>Std. Error of the Estimate</u>
1	0.28	0.078	0.069	4.3567

a. Predictors: (Constant), DJ

The table above shows the relationship between distributional justice and OCB. This table also shows the 1units increase in distributional justice causes 28 units increase in OCB.

**Table8: ANOVA**

Model 1	<u>Sum of Squares</u>	<u>Df</u>	<u>Mean Square</u>	<u>F</u>
1 Regression	158.065	1	158.65	8.328
Residual	1860.125	98	18.981	

a. Predictor: (Constant), DJ      b. Dependent Variable: OCB

This ANOVA Table tells that the model is fit. In the table, the regression sum of square value is less than the residual sum of the square but the value of F is .8.328 which shows that the model is fit or significant which explains the relationship.

**H4:** *Interactional Justice has positive impacts on OCB. (Accepted)*

**Table 9: Model Summary**

Model I	<u>R</u>	<u>R Square</u>	<u>Adjusted R Square</u>	<u>Std. Error of the Estimate</u>
1	0.26	0.068	0.058	4.38142

a. Predictors: (Constant), IJ      b. Dependent Variable: OCB

The table above shows the relationship between institutional justice and OCB. This table also shows the 1 units increase in institutional justice causes 26 units increase in OCB.

**Table 10: ANOVA**

Model 1	Sum of Squares	Df	Mean Square	F
1 Regression	136.9	1	136.9	7.131
Residual	1881.29	98	19.197	

a. Predictor: (Constant), IJ    b. Dependent Variable: OCB

This ANOVA Table tells that the model is fit. In the table, the regression sum of square value is less than the residual sum of the square but the value of F is 7.131 which shows that the model is fit or significant which explains the relationship.

**Table 11: Coefficients**

Mode 1	Unstandardized Coefficients	Standardized Coefficients			
	B	Std. Error	Beta	t	Sing.
1 (Constant)	21.582	1.926		11.207	.000
IJ	.263	.099	.260	2.670	.009

a. Dependent Variable: OCB

**B** is the regression coefficient. As per the table above the value of B is 21.582, which indicates a positive relationship between institutional justice and OCB. The value of **t** is 11.207 which are greater than 2 which show the model fitness and the significance value is .000 so researcher confirms this hypothesis that there is a positive relationship.

**H5:** *Employee trust mediates the associations between Organizational Justice and OCB, which is a positive impact on OCB. (Rejected)*

**Table 12: Model Summary**

Model I	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.366	0.134	0.116		4.42781

a. Predictors: (Constant), OCB, OJ

The table above shows the relationship between organization justice and OCB and the mediating role of employment trust. This table also shows the units increase in organization justice causes 36 units increase in OCB.

**Table 13: ANOVA**

Model 1	<u>Sum of Squares</u>	<u>Df</u>	<u>Mean Square</u>	<u>F</u>
1 Regression	295.016	2	147.508	7.524
Residual	1901.734	97	19.606	

a. Predictor: (Constant), OCB, OJ      b. Dependent Variable: Employment Trust

This ANOVA Table tells that the model is fit. In the table, the regression sum of square value is less than the residual sum of the square but the value of F is 7.524 which shows that the model is fit or significant which explains the relationship.

**Table 14: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sing.
	<u>B</u>	<u>Std. Error</u>	<u>Beta</u>			
1 (Constant)	3.023	3.149			.960	.340
OJ	.223	.061	.371		3.681	0.000
OCB	-.014	.105	-.014		-.136	.892

a. Dependent Variable: Employment Trust

B is the regression coefficient. It tells the change brought in a direct variable (DV) when one unit of the indirect variable is changed. As per the table above the value of B for OP is .223, which indicates that if organizational justice is increased by one unit it brings 22.3 units change in OCB. The value of t is 3.681 which are greater than 2 which show the model fitness and the significance value is below the required range of .05 but the value of B for OCB -.014, which indicates a negative relationship. The value of t is -.136 which is less than 2 which shows that model is not fit and significance value is greater than the required range .05 which is insignificant, so researcher confirms this hypothesis that there is an insignificant relationship between organizational justice and OCB.

## 6. Conclusion

This study can assist the management of call centre industry for enhancing the association between organizational justice and organizational citizenship behaviour of employees at the workplace. As a result, it has been proved that there is a positive

impact among organizational Justice, distributional justice and interactional justice with organizational citizenship behaviour and negative impact with distributional justice. This study demonstrates that there is no mediation effect between organizational justice and OCB due to employment trust.

### **7. Recommendation**

Employees are the key resource for every organization. Employee behaviour affects from organizational justice because every employee has desires to be treated fairly in his workplace. In order to investigate in the Call centre industry, in general, these behaviours should be promoted. This is important to see the employee trust on the management and organization as well. On the basis of the analysis, the following recommendations were made.

The findings emphasize the importance of organizational justice dimensions and can help the management to improve their decision-making; to develop an environment of trust; effective rewards system, procedure evaluation system, and the proper information system should be developed to cope the organizational citizenship behaviour and call centre industry management should make their employees believe that they are valuable for the Call Centre Industry.

### **8. Limitations**

The sample was collected only from Call service agents and call centre management; the data were only collected through questionnaire and no interview and discussion were made and the results provide additional support for several other types of research from different countries.

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