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- Globalization
- Economics
- Knowledge Management
- Leadership
- Marketing
- Operation Management
- Organization Behavior
- Organization Development
- Supply Chain Management
- Sustainability
- Human Resource Management
- Total Quality Management

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*Sitara-e-Imtiaz*

Vice Chancellor, Sukkur IBA University

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## Editorial

*Dear Readers,*

Once again, it's a pleasure to bring you the latest issue of **Sukkur IBA Journal of Management and Business - SIJMB**. Following our editorial policy, this issue contains double blind peer-reviewed articles which address the key business, management and economic issues pertaining to both national and international levels. The continued efforts of our editorial team and reviewers have enabled **SIJMB** to present you the high-quality research work based on the innovation, originality and contemporary issues in the core areas but, not limited to business, management and economics. **SIJMB** follows continuous improvement policy, and I thank all the stakeholders who have been the part of it. Moreover, **SIJMB** has continued its open access policy in order to reach larger audience and wider dissemination of published work.

While not forgetting that the **SIJMB** has an institutional association with **Sukkur IBA University**. In fact, the initiation of **SIJMB** is an outcome of strong research orientation followed by the Sukkur IBA University and I am grateful for continuous institutional support in this regard. In addition, the **SIJMB** provides valuable platform for national and international researchers and publishes their research findings and disseminates those to the largest audience. The journal does not charge any fees and provides complimentary copy (in hard form) to each author. In addition, the supplement copies of the journal are also distributed to HEI and R&D institutions of the country. The journal has been archived by world's renowned scientific repositories. Journal has received recognition from several research agencies, universities and renowned professors. With pleasure, it is also to share with you all that the **SIJMB** has recognized by the **Higher Education Commission (HEC)**. In coming years, the journal aims to improve its current state by attracting more national and international researchers in the field of business, management and economics.

On behalf of the **SIJMB**, I welcome submissions for the upcoming issues of the journal and looking forward to receiving your valuable feedback.

**Dr. Khalid Ahmed**

*Editor-in-Chief*

**SIJMB**

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## Supervisory Support as Moderator between Work Family Conflict and Turnover Intentions

Aneel Kumar<sup>1\*</sup>, Khalil Ahmed Channa<sup>2</sup>, Niaz Ahmed Bhutto<sup>2</sup>

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**Abstract:**

The purpose of this research is to investigate supervisory support as moderator between work family conflict (WFC) and turnover intentions in banking sector employees, working in Sindh province of Pakistan. Primary data were collected through Likert type survey questionnaire, targeting the 181 employees, working in commercial banks. The findings of this study shows the significant positive effect of work family conflict on turnover intentions of employees. Moreover, supervisory support was found as the significant moderator of the relationship between work family conflict and turnover intentions. The moderating effect of supervisory support significantly reduced the turnover intentions level of employees which they experienced due to work family conflict.

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**Keywords:** Work Family Conflict, Supervisory Support, Turnover Intentions.

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### 1. Introduction

The environment in banking sector of Pakistan is very challenging. It is a routine for employee to work late hours. Employees hardly leave their job before sunset. Due to cut-throat competitions, customer are given more than due care. In most of the banks, particularly in the area focused in current study, customers are allowed to deposit and withdraw amount even after official work hours. In such circumstances it becomes very difficult for employees to fulfill their family role demands, and as a result they are likely to face conflict between their work and family demands. In organizational behavior literature such inter-role conflict is termed as work family conflict (WFC). Netemeyer, et al. (1996) defines WFC as “a form of inter-role conflict in which the general demands of time devoted to, and strain created by the job interfere with performing family-related responsibilities” ( P. 401). WFC has been tested as the significant predictor of many work place attitudes and behaviors and one of the potential outcome of WFC in the workplace is turnover intentions (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Dinger, Thatcher, & Stepina, 2010; Haar, Roche, & Taylor, 2012; Pasupuleti, Allen, Lambert, & Cluse-Tolar, 2009). Further, WFC has also been tested as significant predictors of some workplace outcomes in context of Pakistan such as employees’ performance (Ashfaq, Mahmood, & Ahmad, 2013), job satisfaction (Ahmed & Muhammad Muddasar, 2012) but little attention has been given to the role of WFC in

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developing turnover intentions. Therefore, this study tends to investigate the effect of WFC on the turnover intentions. Further, job demand resource model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) posits that if employees are provided resources in the workplace than such resources can counter the effect of job demands. This model proposes supervisory support as one of the potential resource for managing the work role demands of employees. Furthermore, the research on context of current study shows that corporate sector of Pakistan, including the banking sector, is at stage of infancy in adopting the human resources management (HRM) practices and due to such ineffective HRM practices, employees form groups with each other for seeking help. However, managers of banks have been trying to implement the HRM practices informally (Khilji, 2013). Further, the collectivist cultural context of the current study (Hofstede, 2016) can be the added advantage, which can let us presume that supervisors can be very helpful for employees to reduce their turnover intentions. Therefore, based on the job demand resource model (Demerouti et al., 2001), and collectivist cultural context (Hofstede, 2016; Khilji, 2013), we argue that if employees are provided social support resources such as supervisory support then employees turnover intention level developed due to WFC can be decreased. Therefore, the overall objective of this research is to investigate supervisory support as the moderator between WFC and turnover intentions in the employees of banking sector of Sindh, Pakistan.

## 2. Theoretical Framework and Hypotheses

One of the initial works on work family conflict (WFC) by Greenhaus & Beutell (1985) defines WFC as “a form of role conflict in which the role pressures from work and family domains are mutually incompatible in some respect that is participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (p. 77). Further, Gutek et al. (1991) argues that as WFC is related to two domains i.e., work and family. Therefore, they propose that WFC can be two directional i.e., work interference with family (WIF) and family interference with work (FIW). If conflict is initiated from work place and it does not allow an individual to perform family role, then such conflict is termed as WIF. Further, if conflict is initiated from home and it does not allow an individual to perform work role, then such conflict is termed as FIW. Furthermore, to measure these both direction of WFC, Netemeyer, et al. (1996) developed the scale which measures both directions of WFC but they called WIF as WFC and FIW as family-work Conflict. They defines WFC as “a form of inter-role conflict in which the general demands of time devoted to, and strain created by the job interfere with performing family-related responsibilities” ( P. 401). This study investigates WFC rather than FWC due to the focus of this study which was to contribute in the organizational context of employees, rather than the home context. WFC has been tested as the significant predictor of many work place attitudes and behaviors such as psychological strain (Kalliath, Hughes, & Newcombe, 2011), turnover intentions (Haar et al., 2012). turnover intentions, (Amstad et al., 2011). Although, WFC has been tested as predictor of turnover intentions (Amstad et al., 2011; Dinger et al., 2010; Haar et al., 2012; Pasupuleti et al., 2009) and WFC has also been

tested as the predictor of some work related outcomes in context of Pakistan such as employees' performance (Ashfaq et al., 2013), job satisfaction (Ahmed & Muhammad Muddasar, 2012) but it has hardly been tested as predictor of turnover intentions. SamGnanakkann (2010) describes turnover intentions as the employees' thoughts about leaving an organization. Turnover intentions is actually a step to actual resignation (Alexander, Lichtenstein, Oh, & Ullman, 1998). Cinamon & Rich (2002) suggested that people who value their family may also show responsibility at work because of getting some extra financial benefit from their organization and as a result, the extra effort put to workplace creates stress and leads to turnover intentions. Therefore, based on these studies, we may argue that the negative experiences of WFC can create the intentions of turnover. Further, we argue that on the one hand, the environment in banking sector of Pakistan is very challenging. It is routine for employees to work late hours. Employees hardy leave their job before sunset. Due to cut-throat competitions customer are given more than due care. In most of the banks, particularly in the area focused in current study i.e., Sukkur, Khairpur districts of Sindh province of Pakistan, customers are allowed to deposit and withdraw amounts even after official work hours. In such circumstances it becomes very difficult for employees to fulfill their family role demands. On the other hand, the majority of people in Pakistan lives in joint family setup (Itrat, Taqui, Qazi, & Qidwai, 2007), where individuals not only take care of their wife and children but they also take care of the demands of their parents and other family members as well. In such circumstances, it is likely that employees will experience WFC which can develop the turnover intentions in the employees. Therefore, we propose that;

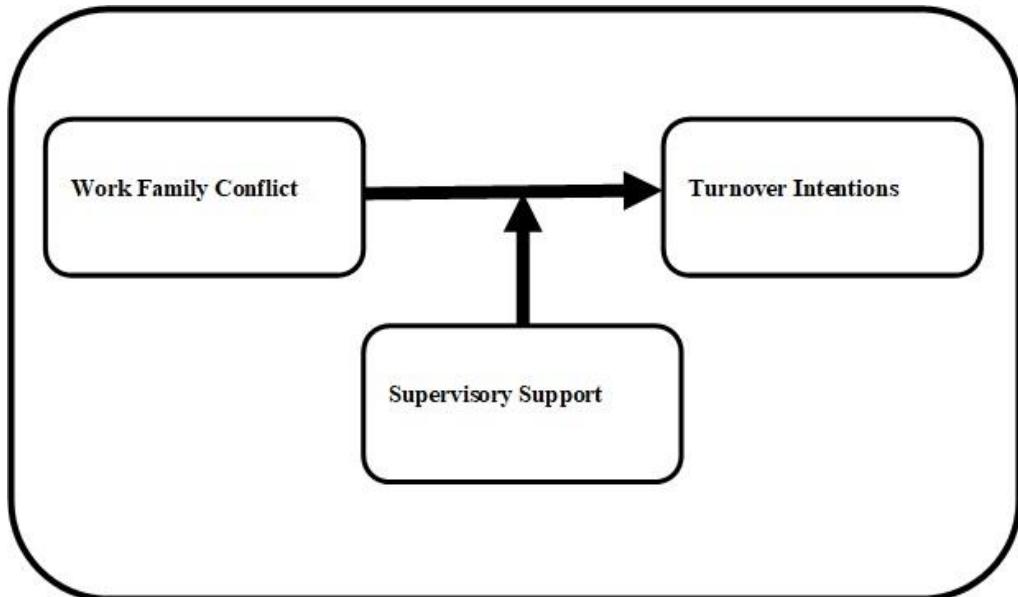
**Hypothesis 1:** *Work family conflict significantly increases the turnover intentions level of employees.*

Work family conflict theory (Greenhaus & Beutell, 1985) posits job demands as the one of the prime sources of WFC among the employees. Furthermore, the job demand resource model (Demerouti et al., 2001) posits that the work place resources can be used as the mechanism to counter the work demands. One of the resource is the supervisory support. Supervisory support is considered as the social support resource. This research has focused on the supervisory support as the resource based on job demand resource model and due to the collectivist cultural context of current study (Hofstede, 2016; Khilji, 2013). People living in collectivist cultural context are likely to offer love, support to each other and the lack of social resources such as supervisory support can lead to employees to make the decisions like withdrawal form job as the ultimate solution (Demerouti et al., 2001). Employees consider their supervisors as the agents of organization and they can play a significant role in retention of employees (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Being agents of the organization, they have got some authority to help employees to meet their work demands. Further, they can provide information to employees, regarding the organizational work family policies, they can interact with employees and listen to their

personal problems (Allen, Amason, & Holmes, 1998). Therefore, based on the job demand resource model, and collectivist cultural context of this study, we argue that if the supervisor is supportive then employee's turnover intentions level developed due to WFC can be decreased. Although supervisory support is already tested and found as significant moderator in work family conflict studies such as between work demands and WFC (Yildirim & Aycan, 2008), between job control, work overload and WFC (Warner & Hausdorf, 2009), it is rare to find any study testing supervisory support as moderator between WFC and turnover intentions. Thus, we propose that,

**Hypothesis 2:** *Supervisory support moderates the positive relationship between work family conflict and turnover intentions such that the positive relationship will be weaker when supervisory support is high as compared to when supervisory support is low.*

### 3. Research Model



*Figure 1: Research Model*

### 4. Research Methodology

#### 4.1 Sample

The primary data for this study were collected from the employees of banking sector of Sindh province of Pakistan. Data were mainly collected from two districts i.e., Sukkur and Sindh. Although, around 300 questionnaires were distributed but some respondents either did not return the questionnaire even after two visits or some did not properly fill the questionnaire. We did not force any respondent to fill the questionnaire. They were given open choice to participate or do not participate in the study. Therefore, only 181

properly filled questionnaires were included in the current study which makes a healthy response rate of around 60 percent. The demographic information of respondents is given in table 01.

**Table 01:** Respondents Demographics (N= 181)

Demographic Variable	N	Percentage
Gender		
Male	136	75.0
Female	45	25.0
Age (In Years)		
20 – 29	92	50.8
30 – 39	67	37.0
40 – 49	20	11.0
Above 50	02	01.1
Experience (In years)		
01 < 02	23	12.7
02 < 05	111	61.3
05 < 10	31	17.1
10 and above	16	08.8

#### 4.2 Measures

A five point Likert scale questionnaire is used for conducting survey for data collection. WFC is measured by five items' scale adopted from the study of Netemeyer, et al. (1996). Turnover intentions is measured by a four items' scale adopted from Kelloway, et al. (1999). Supervisory support is measured through a five items' scale adopted from Allen et al. (1998).

#### 5. Data Analysis and Results

Initially we performed preliminary data screening tests (Pallant, 2010). It is very important to perform these tests before the analysis of results such as the presence of outliers may distort the results. The existence of missing values or aberrant values may provide alternative explanations. Further, confirmatory factor analysis (CFA) was conducted to assess the independent structure of the data and the fit of measures in context of current study. Model fit indices, recommended by Hair, et al. (2010) were followed. Comparative Fit Index (CFI) and Tucker–Lewis Index (TLI) value of .90 or above and Root-Mean Square Error of Approximation (RMSEA) value less than 0.08 are considered as good fit for any model. CFA results show that our model best fits the data as all the fit indices were well above the threshold values (CMIN/DF= 1.16, CFI=.97, TLI=.96, RMSEA=.03). We also checked the reliability of variables. This followed the descriptive statistical techniques that were applied to determine mean, standard deviation, correlations. Finally, regression analysis, through modprobe macro (Hayes

& Matthes, 2009) were conducted to test the main effect of WFC on turnover intentions and the moderating effect of supervisory support. The results of mean, standard deviation and reliability are given in table 02. Although 0.7 is considered as an excellent value for reliability of a construct, however a score of 0.5 and above indicates the acceptability and a score of 0.6 is considered as good (Gliem & Gliem, 2003). Therefore, all the constructs, included in current study are well within the acceptable level.

**Table 02:** Mean, Standard Deviation and Reliability

Alpha Coefficient	Mean	St. Deviation	
Work Family Conflict (WFC)	4.03	.52	.63
Supervisory Support	3.19	.68	.72
Turnover Intentions	4.10	.57	.75

Correlation result between WFC and turnover intentions were significant ( $r = .30$ ,  $p < .01$ ). The correlation of supervisory support with WFC and turnover intentions were insignificant. The correlation of demographics (i.e., gender, age, experience) with the turnover intentions were insignificant therefore, these were not included in further regression analysis. Correlation results are given in table 03.

**Table 03:** Correlation Matrix

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1. Gender	1					
2. Age	-.21**	1				
3. Experience	-.18*	.62**	1			
4. Work Family Conflict	.04	.13	.11	1		
5. Supervisory Support	.09	-.19**	-.09	-.02	1	
6. Turnover Intentions	.03	.04	-.07	.30**	.07	1

\* \* Correlations are significant at 0.01 levels

Subsequently, regression results showed that WFC has significant effect on turnover intentions ( $\beta = .28$ ,  $p < .01$ ). Therefore, H1 was fully supported. Furthermore, the interactive effect of WFC and supervisory support on turnover intentions was also significant ( $\beta = -.37$ ,  $p < .01$ ). Therefore, H2 was also fully supported. Overall, model explained around 15 percent of significant variance in turnover intentions of the employees and the change in r-square due to moderating effect was around 05 percent

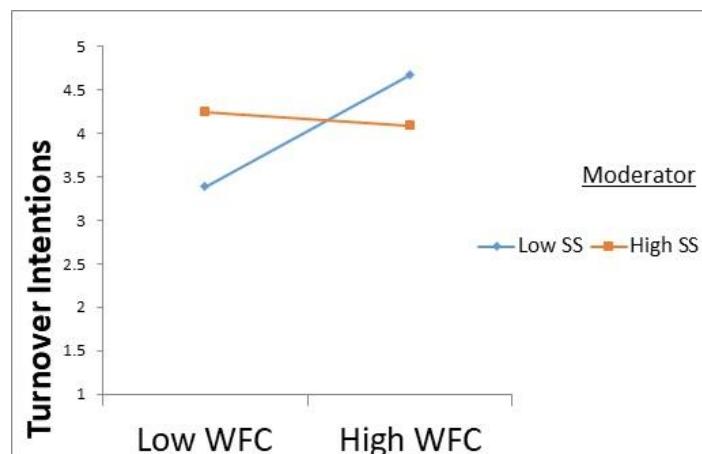
which was also significant. These results are given in table 04.

**Table 04:** Main effect of work family conflict and moderating effect of supervisory support on turnover intentions

Independent Variables	$\beta$	Std. Error	t
p			
Work family conflict	.28 .00**	.07	3.6
Supervisory Support	.07 .23	.05	1.18
WFC X Supervisory Support	-.37 .0015**	.11	-3.22

Dependent Variable: Turnover Intentions  
R-Square: .15; R-Square change due to moderation: .05  
F – Value: 10.36; Significance level: \*\* = .00

Furthermore, slopes were drawn to check the effects of moderator (i.e., supervisory support) on the relationship between WFC and turnover intentions at different levels of moderators. The slope showed that the level of turnover intentions increased as WFC increased, when supervisory support was low. The level of turnover intentions decreased as WFC increased, when supervisory support was high. These results are consistent with our hypothesis 2 for interactive effects of WFC and supervisory support on turnover intention. The Slope is given in figures 2.



**Figure 2:** Slope for the Interactive Effect of Work Family Conflict (WFC) and Supervisory Support (SS) on Turnover Intentions

## 6. Discussion

The results of this study showed existence of WFC in the employees. The reasons for existence of WFC could be larger growing number of banks branches as compared to

increase in customers. To keep good relations with customers, banks facilitate their customers even after official work hours, which does not allow employees to go to their homes timely, and resultantly it is creating the WFC in the employees of banking sector. The employees' perceptions regarding turnover intentions were also high. The reasons for turnover intentions of employees could be the growing number of new banks and their branches and extra work hours without pay that employees perform in routine. Further, the results of this study showed that WFC has significant effect on turnover intentions of the employees of banking sector. These results are also consistent with the studies testing effect of WFC on turnover intentions (Amstad et al., 2011; Dinger et al., 2010; Haar et al., 2012; Pasupuleti et al., 2009).

Furthermore, based on demand resource model (Demerouti et al., 2001), we proposed supervisory support as the moderator between WFC and turnover intentions. Our results showed that supervisory support significantly moderates the relationship between WFC and turnover intentions as we proposed. The role of supervisory support as moderator was found very effective to reduce the turnover intentions level of employees experienced due to WFC. The interactive effect of supervisory support with WFC not just made the relationship between WFC and turnover intentions weaker but actually the supervisory support's moderating effect changed the direction of the relationship from positive to negative, which shows the influential role of supervisory support as moderator. Such strong influence of moderator can be due to the collectivist cultural context of Pakistan (Hofstede, 2016; Khilji, 2013).

### **6.1 Theoretical and Managerial Implications**

This research contributed theoretically by incorporating the WFC theory (Greenhaus & Beutell, 1985) and demand resource model (Demerouti et al., 2001) in context of Pakistan. From the managerial implications point of view, this research recommends that the employees of banking sector are experiencing WFC and such negative experiences are developing the turnover intentions. Environment in banking sector of Pakistan is very competitive which results in heavy workload on employees (Kumar & Arain, 2014). Further, even there is no limit of time and employees are likely to work long work hours beyond the specific job timings (Bashir & Ismail Ramay, 2010). As a result, it becomes very difficult for employees to balance their work and family role (Kumar, Channa, & Bhutto, 2017). This study can be considered as the wakeup call for the banking sector organizations to pay serious attentions to the issue of work family conflict arising. Loyal employees are the long term asset of an organization. Human resources practices in organizations of Pakistan or even in banking sector are at the stage of infancy (Khilji, 2013). Further, the policies for just the work role of an employee may not work anymore and organizations should also develop the policies and programs which provide support for managing the family role responsibilities of an employee. If measures are not taken by the banking sector organization, the turnover intentions developed due to experiences of WFC can lead to actual turnover. Based on the results of this study, this research suggests that in absences of effective human

resources management practices and work family policies, the resource of supervisory support can be very helpful to reduce the turnover intentions of employees. Employees consider their supervisors as the agents of organization and they can play a significant role in retention of employees (Eisenberger et al., 2002). Therefore, organizations should also provide training opportunities to supervisors. Further, supervisors may be provided detailed information, regarding the work family policies of organization, for effective management of the work family role of employees. At the time when employees are experiencing WFC or when such negative experiences are developing turnover intentions, supervisors with their interpersonal skills, by providing work family policies related information to employees and discussing with employees their personal problems can work like a savior for the employees to reduce their turnover intentions.

## 6.2 Limitations and Future Directions

The cross-sectional data were used in the current study which may not establish the causal effects. Therefore, the future research may use longitudinal data. The other potential moderators such as coworkers' support, organizational support can be used in the relationship between WFC and turnover intentions because these are also considered as the potential sources of social support. The other possible outcomes of WFC such as job satisfaction, burnout, can be tested. It could provide the interesting insights to test the WFC and family work conflict together and comparing their effects. Other studies may take job demands, proposed in job demand resource model and test their effect on WFC of employees. The other potential antecedent of turnover intentions such as target oriented banking can be tested. Further, it can be studied that do the turnover intention is converted into real turnover or not. Moreover, it should be tested in other sectors of Pakistan for more generalizable results, as results of this study are limited only to banking sector employees.

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## Impact of Credit Risk Transfer Techniques on Lending Behavior of Conventional & Islamic Banks in Pakistan

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### Abstract

Application of risk management techniques gain significant importance after the financial crises of 2008. Banks adopt contemporary risk management techniques to eliminate credit risk associated with the enlargement of their lending volume. The present study aims to analyze the impact of credit derivatives on lending/financing behavior of conventional and Islamic banks of Pakistan. The study used comparative analysis by employing random effect model for the sample of 20 conventional banks and pooled OLS regression on sample size of 5 Islamic banks for the period of 2006-2016. Results of the study show that conventional banks effectively increase their lending volumes by utilizing risk transfer techniques. However, Islamic banks are still at its infancy in utilizing risk transfer techniques due to shariah restrictions. The study recommends policy implications for Islamic bank to introduce innovative shariah compliant hedging instruments to boost their financing portfolios.

**Keywords:** *Lending Behavior, Bank Credit Supply, Credit Risk Transfer, Credit Derivatives.*

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### 1. Introduction

The financial crises in 2008 exposed high insolvency costs which motivate both conventional and Islamic banks to implement risk management procedures. These risk management procedures facilitate banks to achieve desire results in their portfolio by the transmission of risk. Innovation in financial markets and development of new financial instruments such as credit derivatives and collateralized debt obligations (CDO) lead to better diversification of portfolios by providing a wider range of techniques for risk management (Cebenoyan & Strahan, 2004; Greenspan, 2005). Credit derivatives are financial instruments used to transfer credit risk of loans and other assets. There are various types of credit derivatives such as options, forwards and swaps etc. Utilization of these tools raised the question by conventional as well as Islamic banks regarding their impact on lending volume (DUFFIE, 2007). Market analysts and risk managers stress on the importance of these new techniques as they empower banks to divest their risks and ensure the growth in lending (Forum, 2008; Hirtle, 2009; Wagner & Marsh, 2006).

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Islamic banks acknowledge the importance of credit risk transfer techniques to actively manage financial risks. However, they are reluctant to use these techniques due to shariah controversies (Ahmed & Khan, 2007). Literature shows that Islamic banks procedures involved high credit risk due to trading with shariah rules as well as with government laws in contrast to these of conventional banks (Zahan & S Kenett, 2012). Therefore, Islamic banks may need to employ innovative shariah compliant risk management practices to divest their existing and projected credit risk. Till to date, literature on analyzing the comparative impact of credit risk transfer techniques on lending behavior of conventional and Islamic banks is scarce. More precisely, there is a limited work available on this topic in the context of Pakistan, where the parallel banking system exists. The impressive growth of Islamic banking share in Pakistan also motivates the researcher to conduct the comparative analysis by examining the impact of risk transfer techniques (derivatives) on lending behavior of conventional as well Islamic banks of Pakistan.

The study provides policy implications to regulators and risk managers in conventional and Islamic banks. As the results of study confirmed the significance of using credit risk mitigation techniques to increase the lending volume of conventional banks. Therefore, risk managers in conventional banks need to focus on introducing innovative derivative tools to support their lending growth. However, the study also suggests the Islamic banks to develop Shariah compliant derivative products to enhance their financing performance. For future research, this study extends the literature on the comparative credit risk transfer/management techniques.

The remaining part of the study is structured as the literature review presents the existing knowledge on the credit risk transfer instruments and techniques. Third section discusses the methodology of the study. Moreover, next section comprises the discussion based on estimated results connecting them to the existing knowledge specified in literature review. The last section presents conclusion along with the recommendations of the study.

## **2. Literature Review**

Risk management is imperative for the performance of banks. Banks increasingly recognized the necessity to estimate and supervise the risk associated in their lending portfolio by using quantitative methods. Banks realized that concentration of credits can adversely influence their financial efficiency. They also employ risk derivatives concerning the portfolio theory to protect customer relationships and mainly to transfer risk proficiently (Kairu, 2009). Haensel and Krahnen (2007) Conclude that risk appetite of issuing bank can be enhanced by use of modern risk instruments. Literature shows that there are several innovative derivative products such as futures, forwards, swaps, options etc. that can improve the lending behavior of banks. These derivative products are used by conventional banks to cope up with their credit risk (DUFFIE, 2007). With respect to the innovation in risk transfer instruments, Goderis, Marsh, Castello, and

Wagner (2007) conducted a study by including all the banks in the sample which are applying risk mitigation techniques to remove credit risk from their borrowers. By applying the panel data approach, they found that modern risk mitigation tools have positive influence on the lending growth of banks. It is identified from the previous empirical studies that to mitigate the risk exposure of firm, derivatives are widely in exercise. <sup>2</sup>Allen and Gale (2004) Concluded that in times of distress no doubt these developments (derivative products) enhance the benefits by increasing the capacity of banks to expand their lending activities.

Academic studies in context of conventional banking sector concentrate more on the trend of risk transfer as compare to Islamic sector. Due to some shariah controversies this phenomenon exhibits little concentration by Islamic banks. Islamic banks may be expected to face two types of risks: risks that are similar to those faced by traditional financial intermediaries and risks that are unique owing to their compliance with the shariah. Furthermore, Islamic banks are constrained in using some of the risk mitigation instruments that their conventional counterparts use as these are not allowed under Islamic commercial law due to the presence of gharar and element of riba (Ahmed & Khan, 2007).

Khan et al. (2016) Suggests to the *fiqh* scholars to review their position and allow the Islamic banks to use these contemporary contracts such as future, swaps and options for hedging<sup>3</sup>. Ali (2015) and Zakaria and Ismail (2007) constructed the empirical and conceptual setting to examine the impact of CRT on lending and financial stability of Islamic banks. The results of their study demonstrated that Islamic banks behave like conventional banks in context of using risk mitigation techniques. Many empirical studies discuss the evolution of financial sector and factors influencing the growth of credit in commercial banks. However, less concentration is paid in the context of developing economies like Pakistan. Financial market of Pakistan has enormous space for improvement of derivatives. Banking organizations need to enhance their capabilities to use a range of derivative products (S. Akhtar, 2006). The outstanding improvements in fundamental derivatives instrument have been witnessed during 2004-2005 in Pakistan (R. I. McKinnon, 2010).

Afza and Alam (2011) and Khan et al. (2016) conducted quantitative research to examine the factors that affect the decision of firms to use the foreign exchange derivative (FX). This research is conducted by taking 86 non-financial firms listed in

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<sup>2</sup> Nwankwo; (Chodechai, 2004); (Chernykh & Theodossiou, 2015; Olokoyo, 2011); Ansari (2006); (Aisen & Franken, 2010; Berrospide & Edge, 2010; Rai & Kamil, 2010; Stepanyan & Guo, 2011); Grodzicki et al. (2010); (R. I. McKinnon, 2010); (Demirguc-Kunt & Levine, 2004).

<sup>3</sup> Hedging contracts like forward and future contracts, repurchase agreements, forward rate agreements etc. such contracts are adjustable according to shariah perspective. Like future contracts can be made using salam for animals, mineral oils etc.

KSE for the time duration of 2004-2007. In Pakistani context, many studies (e.g. (Afza & Alam, 2011; Ahmad, Malik, & Humayoun, 2010; Imran & Nishat, 2013)) tried to explore different forms of risk mitigation instruments and also explain how they are utilized for hedging purposes. But very few studies focus on the comparative analysis of conventional and Islamic banks on the risk mitigation techniques and its influence on lending behavior of Pakistani banking sector. Afza and Alam (2011) and Ahmed and Khan (2007) in their studies examined factors that affected the decision of firm to utilize FX derivatives, without considering other forms of derivatives i.e. futures, forwards and swaps and their impact comparatively on the lending behavior of conventional and Islamic banks. Present manuscript aims to fill up this gap by considering the influence of these innovative instruments on the lending behavior of Pakistani financial sector by including conventional as well as Islamic banks.

### **3. Methodology**

This section provides the research design and the method for the gathering and analysis of data. This section represents the model specification, estimation technique and support test for the data analysis and interpretation.

#### **3.1. Model specification**

Literature shows that there is a positive effect on credit growth due to the usage of modern risk management practices. From literature it is analyzed that by using derivative instruments lending volume of banks increases (Ali, 2015; Rodríguez & Carbó, 2000). The present study uses two proxies for lending behavior i.e. gross financing to total assets (GF), net financing to total assets (NF). By adopting the methodology of Afza and Alam (2011) and Khan et al. (2016), this study takes the nominal sum of credit derivative instruments as a proxy of risk transfer techniques. Further some bank specific factors and macro-economic factors are also included in the equation (1) that is; capital ratio, profitability ratio, liquidity ratio, GDP, interest rate and exchange rate.

It is hypothesized in the current study and also proved by the previous studies that bank specific variables have impact on the lending behavior of banks. Moreover economic development encourages the expansion of credit by financial institutions<sup>4</sup>.

#### **3.2. Econometric Model**

The econometric model for this study is;

$$\begin{aligned} LB_{it} = & \alpha + \beta_1 CRT + \beta_2 (ROA)_{it} + \beta_3 (LIQ)_{it} + \beta_4 (CAP)_{it} + \beta_5 GDP + \beta_6 IRR_{it} \\ & + \beta_7 ER_{it} + \varepsilon_{it} \dots \dots (1) \end{aligned}$$

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<sup>4</sup> Paroush and Schreiber (2008); M. F. Akhtar, Ali, and Sadaqat (2011); Ali (2015); (Gurley & Shaw, 1967); (R. McKinnon & Shaw, 1973); (R. I. McKinnon, 2010) and present researchers like (Rehman & Cheema, 2013) and (Beck, 2000).

Where;

$LB_{it}$  = Lending Behavior; CRT= Credit Risk Transfer Instrument (Derivatives); ROA= Profitability Ratio; LIQ = Liquidity Ratio; CAP= Capital Ratio; GDP = Gross Domestic Product Growth; IR = Interest Rate; ER = Exchange Rate;  $\varepsilon$ = Error Term.

### **3.3. Data**

The sample of study comprises all the commercial banks (conventional and Islamic), which fully represent the whole banking sector of Pakistan for determination of risk transfer techniques. The time horizon of sample is CY 2006-2016. The data is extracted from annual reports of banks; moreover the financial statement analysis of banks by SBP for years 2006-10 and 2011-15 is also utilized for calculation of ratios. While the Macroeconomic data is taken from the international financial statistics (IFS) database from the website of the international monetary fund (IMF) and the World Bank data base.

### **3.4. Estimation Techniques**

The study follows the data analysis techniques used by many previous researchers i.e. panel data technique used by (Angora & Roulet, 2011; Ramzan & Zafar, 2014). The study uses a random effect model for conventional banks on the basis of the Hausman specification test, while pooled OLS is used for Islamic banks due to small number of banks. The data is analyzed using STATA software for econometric estimation.

## **4. Results and Discussion**

Descriptive statistics computation of all variables that are used in regression analysis is shown in Table1. The table includes statistics of all dependent, independent and control variables for the time period of 2006 to 2016. The mean value of gross lending (GL) is 47.970 with standard deviation of 11.542, for 2006 to 2016. The mean value of GL depicted the volume of gross lending adopted by banks during this period of time. The other measure of lending (NL) – net lending- is averaged at 43.866, with standard deviation of 10.777, showed the strong position of Pakistani commercial banks in maintaining high financial position. The derivative (DR) variable clocked an average of 16.074, with the standard deviation of 3.931 for years 2006-2016. The mean value of 160% indicated that the banks in Pakistan largely used derivatives to hedge their funds. ROA indicates the average value of 1.204 (120.4%) with deviation of 2.732, while liquidity ratio (LR) averaged at 10.265 with deviation of 4.550. The capitalization measure (CAP) indicated an Average value of 13.432%. The macroeconomic variables (GDP, IR, and ER) indicate the mean value of 3.981 for GDP, IR has an average of 1.611 with deviation of 4.689 in years 2006-2016. Moreover the exchange rate (ER) ranged between 94.5 to 122.51 with the average of 104.432 and standard deviation of 8.900.

**Table 1:** Descriptive Statistics of the Study Variables

Variables	Min	Max	Mean	Std. Dev.	VIF	Tolerance
<b>GL</b>	1	82	47.970	11.542	—	—
<b>NL</b>	1.34	70.86	43.866	10.777	—	—
<b>DR</b>	0	21.707	16.074	3.931	1.17	0.851
<b>ROA</b>	-10.37	11.17	1.205	2.732	1.06	0.940
<b>LR</b>	1.13	28.27	10.265	4.550	1.09	0.951
<b>CR</b>	0.29	72.72	13.432	12.371	1.13	0.887
<b>GDP</b>	1.61	6.18	3.981	1.531	1.64	0.610
<b>IR</b>	-6.77	7.13	1.611	4.689	1.54	0.648
<b>ER</b>	94.5	122.51	104.432	8.900	2.42	0.413

Additionally, Table 1 shows the Variance Inflation Factors for independent variables. As the general rule of thumb the value greater than 4 signifies the issue of multicollinearity, the above table shows that there is no problematic collinearity exists in the variables.

**Table 2:** Correlation Matrix of study variables

	<b>ROA</b>	<b>LR</b>	<b>CR</b>	<b>DR</b>	<b>GDP</b>	<b>IR</b>	<b>ER</b>
<b>ROA</b>	1						
<b>LR</b>	0.087*	1					
<b>CR</b>	0.123	0.058*	1				
<b>DR</b>	0.138	-0.113	-0.281	1			
<b>GDP</b>	0.031**	-0.086*	-0.036**	0.082*	1		
<b>IR</b>	0.021**	-0.204	-0.111	0.140	0.188	1	
<b>ER</b>	0.041**	-0.245	-0.118	0.219	0.595	0.561	1
	<b>ROA</b>	<b>LR</b>	<b>CR</b>	<b>DR</b>	<b>GDP</b>	<b>IR</b>	<b>ER</b>
<b>ROA</b>	1						
<b>LR</b>	0.087*	1					
<b>CR</b>	0.123	0.058*	1				
<b>DR</b>	0.138	-0.113	-0.281	1			
<b>GDP</b>	0.031**	-	-	0.082*	1		
			0.086*	0.036**			
<b>IR</b>	0.021**	-0.204	-0.111	0.140	0.188	1	
<b>ER</b>	0.041**	-0.245	-0.118	0.219	0.595	0.561	1

Note N = 25, T = 11, obs. = 273

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

Pearson correlation Matrix used for independent variables is shown in Table 2. This matrix depicts the strength of linear relationship between two variables particularly between independent variables. The problem of multi collinearity exists if there is strong correlation (coefficient > 0.70) between independent variables (Farrar & Glauber, 1967). The variable in his study are not perfectly correlated to each other as the coefficients are less than 0.70. However, there is moderate correlation between ER

(Exchange Rate) and GDP (60%) and ER and IR (56%). Thus the matrix value indicates no issue of Multi- collinearity and proven grounds of hypothesis testing.

The regression results for random effects after Hausman test are given in the table 3 and 4 which provide details about the regression coefficients and the significance level of independent variables for both models including GL and NL. As there is an issue of serial correlation in both models which is shown in table 6, to cater for these issues the White corrected standard errors were used for estimation introduced by (White, 1980). Table 3 shows the comparative results of conventional and Islamic banks. Although the credit risk exposure is the same for both conventional and Islamic banks Ahmed and Khan (2007), there are some structural and operational differences existing between them. Further, different regression estimation i.e. pooled Ordinary Least Squares (OLS) regression estimation is used to analyze the results of Islamic banks due to small sample size. This estimation has extensively been used in previous studies (Cucinelli (2013); Roman and Şargu (2014)), while for conventional banks the random effects estimation is used.

**Table 3:** Results of the Random effect & Pooled OLS Regression with (GL) Model

Conventional Bank * <sup>1</sup> (Random Effects Results)			Islamic Banks* <sup>2</sup> (Pooled OLS Results)			
Variables	B	R.SE	z-Stat	$\beta$	R.SE	t-Stat
Constant	91.228	11.688	7.81***	-22.30	27.84	-0.80
ROA	0.255	0.427	0.65*	1.168	0.811	1.44
LR	0.365	0.416	0.88	0.368	0.261	1.41
CR	0.032	0.114	0.28	0.266	0.185	1.44
DR	0.860	0.250	3.44***	0.202	0.434	0.47
GDP	-0.571	0.533	-1.07	-2.041	1.318	-1.55
IR	-0.071	0.087	-0.81	0.224	0.403	0.56
ER	-0.565	0.096	-5.87***	0.624	0.278	2.24**
R <sup>2</sup>	0.273			0.255		
Wald Chi <sup>2</sup> /F- statistics	131.13***			2.20***		

Note \*<sup>1</sup>. N = 20, T = 11, obs. = 220

Note \*<sup>2</sup>. N = 5, T = 11, obs. = 53

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

**Table 4:** Results of the Random effect & Pooled OLS Regression with (NL) Model

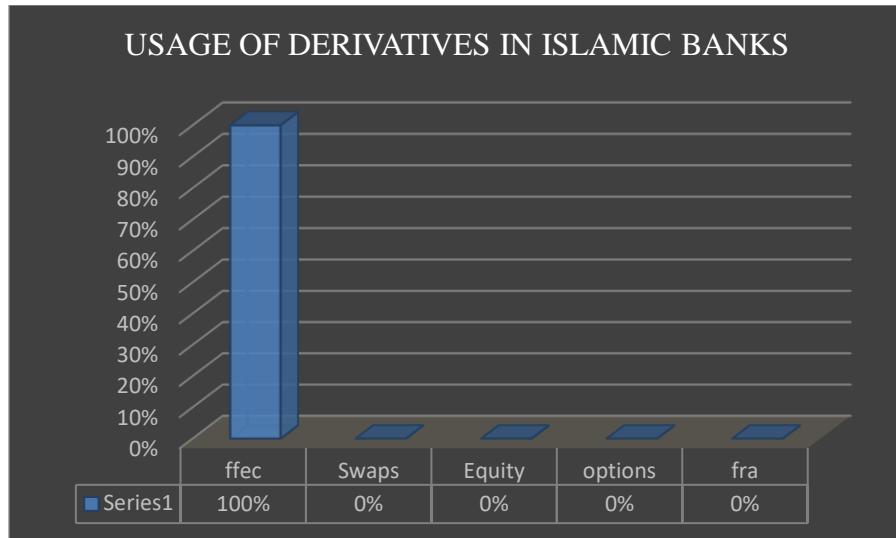
Conventional Bank * <sup>1</sup> <b>(Random Effects Results)</b>			Islamic Banks* <sup>2</sup> <b>(Pooled OLS Results)</b>		
Variables	B	R.SE	t-Stat	B	R.SE
Constant	86.438	8.958	9.65 ***	-14.261	27.95
ROA	0.631	0.395	1.65*	1.286	0.814
LR	0.265	0.350	0.76	0.316	0.262
CR	0.039	0.090	0.43	0.302	0.186
DR	0.864	0.202	4.26***	0.252	0.436
GDP	0.053	0.496	0.11	-1.690	1.323
IR	-0.125	0.069	-1.79	0.234	0.405
ER	-0.585	0.082	-7.09 ***	0.512	0.279
R <sup>2</sup>	0.285			0.219	
Wald	144.77***			1.81*	
Chi <sup>2</sup> /F-statistics					

Note \*<sup>1</sup>. N = 21, T = 11, obs. = 231

Note \*<sup>2</sup>. N = 5, T = 11, obs. = 55

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

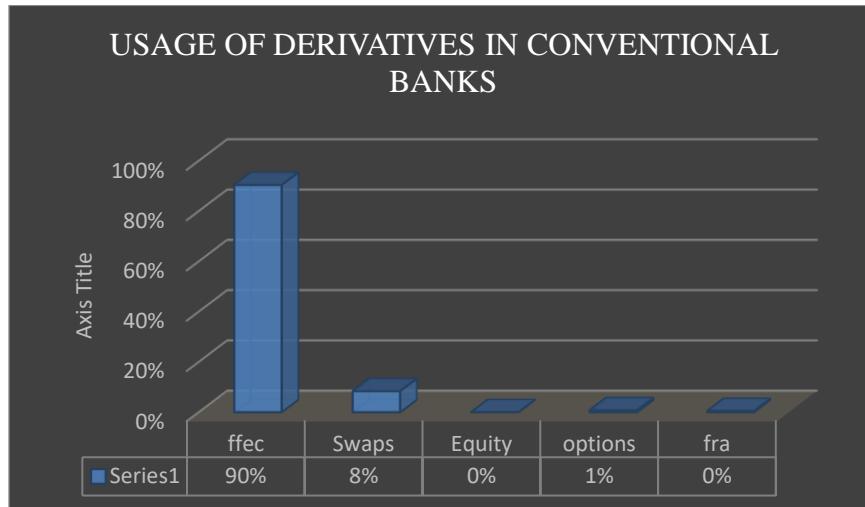
Table 3 and 4 provides the comparative result of regression estimates for gross lending ratio (GL) and Net Lending (NL) for conventional and Islamic banks separately. The result of credit risk measures (DR) confirms the solidness of estimation with significant coefficient value (0.860) and (0.864) at 1% significance level for both models in case of conventional banks. Similar results are evident from the work done by (Afza and Alam (2011); Arping (2004); Nicolo and Pelizzon (2006); Wagner and Marsh (2006)) which implies that CRT derivatives enhance the welfare of financial system by helping banks to diversify and hedge their credit risk and become more efficient and stable. But in the robustness check derivative become insignificant for Islamic banks as also evident from the work of (Ahmed & Khan, 2007; Hirtle (2009)), who implies the negative effect of derivatives on new lending. The results suggest differences on the utilization of derivatives. This may also be due to difference across types of banks i.e. some banks are more active than others in managing their risks and this affects the usage of derivatives (Cebenoyan & Strahan, 2004; Cihák & Hesse, 2008). Similarly it is observe from present study that Islamic banks are less inclined towards using modern techniques of risk mitigation because most of the conventional derivative instruments (swaps, options, and futures) do not conform to shariah. This implies that only conventional sector has significant influence of derivatives on its lending behavior in Pakistan.



*Figure 1: Usage of different types of derivatives in Islamic bank*

Source: Author's own

Usage of different forms of derivatives is shown in the figure 1, where it is clear that just future and forward contracts are used as derivatives by Islamic banking sector. They are not utilizing other forms of derivatives due to shariah obligations. However, they should build some innovative strategies to make the other forms of derivatives shariah compliant as also practised in other Muslim countries.



*Figure 2: Usage of different types of derivatives in conventional bank*

Source: Author's own

As it is clear from figure 2 that future and forward contracts are also very common in use by conventional banks. Other forms are used in a very limited quantity almost 0 and 1 % and these other types are only used by public sector. Conventional banks should also consider other types as by utilizing other techniques their lending performance can be increase. The result of present study shows the insignificant relationship of capital with the lending behavior which is consistent with the results of (Cucinelli, 2013). Consequences of present study are opposed to the theoretical extrapolation of (Ali (2015); Bedendoa and Bruno (2009); Bokpin and Isshaq (2009)), who debates that enhanced capitalization associations prefer to downsizing their credit threats via credit derivatives.

For Islamic banks, the return on assets variable became insignificant for both GL and NL models, demonstrating that ROA has no impact on the lending behavior of Islamic banks conflicting with the literature. In conventional banks ROA indicates significant relationship having positive coefficient value of 0.255 in GL and 0.631 in NL at 10% significance level. This means 98% growth occurs in bank's lending level by 10% increase in ROA. This implies that ROA is a significant predictor of lending behavior. The results of relationship of profitability with lending behavior are according to literature, where in Pakistan, the profitability is positive connected to lending behavior, consistent with the study of (Roman & Şargu, 2014). However, it becomes insignificant when analyzed in Islamic sector. These results are consistent with (M. F. Akhtar et al., 2011; Ramzan and Zafar (2014)). Liquidity ratio (LR) shows the robustness of results, where it became insignificant showing that liquidity has no impact on the lending behavior of Pakistani banks. SBP is functioning on providing various liquidity management resolutions for the industry. To dealing with liquidity in Islamic banks, SBP has launched Bai Muajjal of sukuk during the year as a significant tool.

Capital ratio (CR) remained insignificant for Islamic and conventional banks. The gross domestic product (GDP) and interest rate (IR) remained insignificant for both type of banks in both regression models i.e. GL and NL. ER shows negatively significant relation for conventional banks at 1% level in both models. This is opposed to our expectations and thus, inconsistent with the work of (Ali, 2015). But ER changed its relation with Islamic banks to some extent by showing positive significant results having beta value 0.642 at 5% significance level in GL and beta value of 0.512 at 1% significance level in NL model. The results support the previous studies of (Chodechai, 2004) and (Olokoyo, 2011). Results indicate that exchange rate affects the lending expansion of only Islamic banks greatly as compared to other economic indicators.

## **5. Post-Estimation and Diagnostic Tests**

To check the issue heteroscedasticity in variables that are under study, the test used is proposed by Breusch and Pagan (1979), which was later on extended by (Cook & Weisberg, 1983). In this test, null hypothesis refers the homoscedasticity, while the

alternative hypothesis signifies the heteroscedasticity causes because the variance of error differs with the regressors.

**Table 5:** Breuch-Pagan / Cook Weisberg test

Statistics	GL	NL
Chi-square(1)	0.75	0.02
Prob>chi <sup>2</sup>	0.385	0.900

The result of this test highlights that there is no issue of heteroscedasticity in the two models i.e. GL and NL having insignificant “p” values, because of which null hypothesis of “constant variance” is accepted.

**Table 6:** Wooldridge test

Statistics	GL	NL
F(1,24)	48.101	92.281
Prob> F	0.000	0.000

To check the problem of serial correlation Wooldridge test is used. This test diagnoses for existence or absence of serial correlation in the panel data model, presented by (Wooldridge, 2010). Nonexistence of serial correlation in the idiosyncratic error is stated in null hypothesis, which is tested against the alternative hypothesis of presence of this correlation. Table 6 highlights the test results for both models, which pointed out serial correlation in the GL and NL model because of having correlation in the idiosyncratic error term of this model as evident from the significant probability value of all models, causes the rejection of null hypothesis.

## 6. Conclusion and Policy Implications

The findings of the study suggest that conventional banks in Pakistan are reaping the benefits of credit growth through the utilization of innovative credit derivatives. However, Islamic banks are still impartial towards the use of derivative contracts. Mostly Islamic banks are engaged in the limited use of future contracts to hedge their financing risk which translate into insignificant impact on their financing portfolio. Therefore, it is recommended to introduce innovative shariah compliant credit risk transfer instruments in Islamic Banks of Pakistan as practised in other Muslim countries to boost their financing portfolio. It is also recommended to enhance the lending performance of commercial banks to build up strategies for managing their lending portfolio more effectively by using innovative risk transfer techniques.

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## The Impact of Remuneration and Training and Development on Organizational Commitment

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### Abstract

This study objects to explore the effect of remuneration and training and development (T&D) on organizational commitment (OC). The emphasis of the current study was to clarify a university through remuneration and T&D can accomplish to retain and to be committed with their academic staff. The current study also highlights that remuneration and T&D are best practices which can be adopted and applied even after changes in environment, practices and technology. The study used a cross-sectional and quantitative mail survey approach by getting responses from 346 by using stratified random sampling. The result revealed that remuneration has a major impact over OC. The result also showed that T&D is a vital factor for the OC in public higher education institutions (HEIs). Theoretically, the current study has contributed towards a body of knowledge concerning to organizational commitment under the domain of social exchange theory (SET). Practically, by employing the current study outcomes HR managers, particularly of the universities will be able to pay their attention to some specific factors such as remuneration and T&D to enhance employee retention. Finally, recommendations and limitation with reference to the current study and sector are presented. This study aims to be beneficial for the HR managers at HEIs and the policy makers.

**Keywords:** *Remuneration, Training and Development, Organizational Commitment, Higher Education Institutions.*

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### 1. Introduction

Higher education institution plays an imperative role in to strengthen the entire system of education and the economic development (Mangi, Soomro, Ghumro, Abidi, & Jalbani, 2011). HEIs serve as an integral part in the progress of any country. Likewise, in Pakistan it also plays significant role in her progress and development (Rasheed, Aslam, & Sarwar, 2010). For any higher education institutes, the main asset for its success is the commitment of its academic staff (Omar, Mohamed Anuar, Majid, Halim, & Johari, 2012). According to Chughtai and Zafar (2006) highly committed academic staff plays a central role in the accomplishment of any tertiary institution. However, the one the most critical issues in the higher education institutes is academic staff

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commitment (Khan, Nawaz, & Khan, 2013). Likewise, Shaheen, Sajid, and Batool (2013) also mentioned in their study that due to accessibility of more choices, stakeholders are now complaining about the academic staff commitment and devotion.

Generally, factors that influence organizational commitment in Pakistan have been discussed and examined empirically by several scholars. However, the disagreement arises in the empirical findings from each study due to different human resource management (HRM) practices under study in varying context and sectors and its effect on organizational commitment, but still there is a dire need to uncover and investigate further (Paul & Anantharaman, 2004).

Thus, the current study is focused on OC of academic staff in public sector universities in Pakistan. Enhancing the OC among the academicians is very important. Past researchers highlighted the importance of the OC that well motivated and committed employees perform well and stay loyal. It is indicated from literature review that there is a dire need to investigate further in the area of OC in Pakistan, especially in public HEIs. Therefore, the present study aims to investigate the relationship in between remuneration and training and development and organizational commitment.

### **1.1. Problem definition**

Higher education institute is one of the growing sectors in Pakistan and it contributes significantly in the economic development as well as social development of country. Most of the researchers have studied remuneration and T&D in various industries, but these variables have limitedly studied in education sector of Pakistan. In Addition, most of studies have been carried in western and advanced countries on HRM practices (i.e., remuneration and T&D) and organizational commitment. However, in the context of developing countries like Pakistan a very few studies have been conducted, particularly in the higher education sector (Sial, Jilani, Imran, & Zaheer, 2011). Moreover, most of the previous studies have been done on HRM practices and organizational level performance (Becker & Gerhart, 1996; Delery & Doty, 1996; Huselid, 1995). But very few studies have highlighted that how remuneration and T&D can facilitate individual employee commitment (Allen, Shore, & Griffeth, 2003). There is a need to investigate these variables and their effect on the OC, specifically in HEIs of Pakistan.

Furthermore, most of the HEIs do not have a professional HR department and managers. Mostly managers of the HEIs are unaware of the fact that managers need to retain their academic staff through remuneration and T&D. This study will assist the HR department and manages in the HEIs sector in Pakistan to develop their policy to increase employee retention and employee commitment. In view of this literature gap, the present study is aimed at examining the issue by investigating the relationship between remuneration, T&D and organizational commitment with a specific focus on the academic staff of HEIs.

## **1.2. Remuneration**

Compensation refers to the pay that staff members receive from the organization for their rendered services (Mondy, 2008). Remuneration has frequently been discussed in the literature. The monthly salaries to be paid to the faculty have been operationalized as compensation in the present study. Compensation is one of the essential contractual agreements between the employees and organization (Chew & Chan, 2008). Researchers have consistently explained that compensation plays important role in attracting qualified potential employees and increases commitment of current employees. Well committed and devoted academic staff is really a strategic phenomenon (A. Ahmad, Majid, A. H. A., & Zin, M. L. M., 2015). Sometimes organization offers attractive compensation to retain skilful workforce (Gould-Williams, 1999; Nazir, Shah, & Zaman, 2012; Parker & Wright, 2001). Compensation is a key aspect of workforce motivation (Nazir, Shah, & Zaman, 2014).

Attractive remuneration packages are a key factor of retention as it fulfills the financial and material desire. When employees feel that they are receiving sufficient compensation, they stay longer in the organization (A. Ahmad, 2016; Bibi, 2016). Numerous scholars Bamberger and Meshoulam (2000) and MacDuffie (1995) highlighted that remuneration system plays an important role to retain the employee and enhance their performance level. Similarly, A. Ahmad (2016) and Khan et al. (2013) found that there is an important relationship between remuneration and organizational commitment. Similarly, (Bibi (2016); Bibi, Pangil, Johari, and Ahmad (2017)), also highlighted that compensation is competitive advantage for organizations to improve performance and ability to increasing the commitment level of employees. This implies that when employees receive an attractive compensation package, they feel that organization cares about them, this notion is also supported by SET theory (Blau, 1964). Likewise, R. Saeed et al. (2013) also concluded that the association between remuneration and OC is imperative. Keeping in view the evidences found in the literature of the past studies it is clear that the remuneration may potentially contribute to OC, hence proposed hypothesis is as under:

**H1: There is a significant and positive relationship between remuneration and organizational commitment.**

## **1.3. Training & development and organizational commitment**

Training and development refers to the degree of professional training received by academic staff from their institutes in order to enhance their skills (Delery & Doty, 1996).

T&D was operationalized as formal training programs provided by public sector HEIs in Pakistan in order to improve the skills of academic staff that are needed to perform their jobs. T&D is a very vital aspect of workforce motivation and to improve their knowledge (A. Ahmad, Bibi. P., Khalid, M.M., & Aziz, 2017; Bibi et al., 2017).

Training is a costly activity yet organizations pay special attention to T&D programs to enhance the employee commitment level (Elangovan & Karakowsky, 1999; Lamba & Choudhary, 2013).

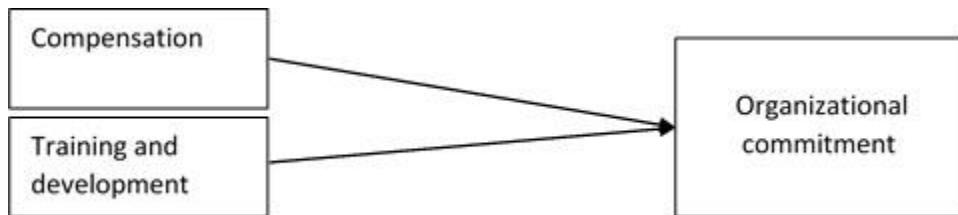
Likewise, training plays a significant role in the current competitive environment and also benefits the employees to achieve their organizational goals (Schuler & MacMillan, 1984; Tsai & Tai, 2003). Furthermore, Chung (2013) probed the correlation between commitment and training in the context of Korea. The outcome of the study showed significant relationship between training and commitment (Chung, 2013). Similarly, Robinson (2013) explored the relationship between the training and organizational commitment. The study revealed significant relationship between training and commitment. Similarly, M. M. Saeed and Asghar (2012) explained that trained employees are more competent and perform their job better than untrained employees.

Alternatively, the finding of a study conducted by Lee, Nam, Park, and Ah Lee (2006) claimed negative relationship between T&D and organizational commitment. The literature also showed that further research is required to investigate the association between training and organizational commitment in the context of developing world Riaz, Idrees, and Imran (2013), mainly in the sector of public tertiary institutions.

Therefore, it can be inferred that training programs play major role in enhancing the commitment level of academic staff. Thus, this study hypothesizes that:

**H2:** *There is significant and positive relationship between training and development and organizational commitment.*

#### 1.4. Research framework



*Figure 1: Research Framework*

## 2. Methodology

### 2.1. Participants and Respondents' Profile

Research design considered is a main phase toward the accomplishment of a research objective (Bush, 2003). To meet the objectives of the research, statistical, cross sectional and descriptive research method was employed. Survey was carried out through distributions of questionnaires to the respondents. Based on the hypotheses and objectives

of the research, a questionnaire is considered to be a suitable instrument to collect data in the study.

The total population for this study is 3500. Considering a response rate of 70%, 500 questionnaires were distributed using stratified random sampling among academic staff of certain public HEIs of Pakistan. Stratified random sampling is considered most suitable method for the current study. The survey involved measures of remuneration, T&D and OC. Total 346 questionnaires were collected from academic staff. Out of the respondents, 75% were males; majority of the respondents are lecturers (64%) and assistant professors (30%). Most of the respondents hold Ms degree (66%) and 28% of the respondent hold postgraduate degree, while only 6% of the respondents hold degree of doctorate. 64% of the respondents were married while 36% were unmarried.

## 2.2. Measurement

**Organizational commitment** – OC is operationalized as the willingness of the academic staff to accept and agree with university values and goals (Malik, Nawab, Naeem, & Danish, 2010). To measured OC 9 items short version were used by (Mowday, Steers, & Porter, 1979).

**Remuneration** – Remuneration is operationalized as pay which academic staff receive as part of services rendered to university (Teclemichael Tessema & Soeters, 2006). 5 items of Teclemichael Tessema and Soeters (2006) were used to measure Remuneration.

**Training and development** – T&D can be defined as how often academic staff received training for the improvement of their skills while working in public sector universities (Delery & Doty, 1996). 4 items were used to measure T&D (Delery & Doty, 1996).

## 3. Result

The current study employed PLS path modelling Wold (1974) to examine the theoretical model. The PLS path modelling is seen as the most appropriate technique in this work. PLS path modelling is similar to conventional regression technique, it delivers the advantage of calculating the relationships between constructs (structural model) and relationships between indicators and their corresponding latent constructs (measurement model) simultaneously (Chin, Marcolin, & Newsted, 2003; Duarte & Raposo, 2010). Moreover, it has been proposed that if research is prediction-oriented or an extension of an existing theory, PLS path modelling should be employed (Joe F Hair, Ringle, & Sarstedt, 2011).

### 3.1. Convergent validity

The researcher examined the convergent validity to conform that factor loadings, average variance extracted (AVE) and composite reliability (CR) meet the threshold value. Furthermore, Table 1 shows that the CR for all the constructs is above 0.7

threshold as recommended by (Joseph F Hair, Black, Babin, Anderson, & Tatham, 1998). The AVE was exceeding then 0.5 and the factor loadings for all items were above 0.5 as recommended by (Joseph F Hair et al., 1998).

**Table 1:** Average variance extracted, factor loading and Composite reliability of Latent variables

CONSTRUCT	ITEM	LOADING	Composite Reliability	AVE
<b>Organizational commitment</b>	OC1	0.679	0.907	0.522
	OC2	0.613		
	OC3	0.697		
	OC4	0.712		
	OC5	0.673		
	OC6	0.776		
	OC7	0.826		
	OC8	0.758		
	OC9	0.749		
<b>Remuneration</b>	REM1	0.764	0.924	0.711
	REM2	0.826		
	REM3	0.906		
	REM4	0.893		
	REM5	0.817		
<b>Training and development</b>	TD1	0.815	0.909	0.715
	TD2	0.886		
	TD3	0.896		
	TD4	0.779		

### 3.2. Discriminant Validity

The discriminant validity in this study is accomplished by analysing the correlation among the latent construct with the square root of AVE (Duarte & Raposo, 2010). Similarly, discriminant validity is also realized by comparing the indicator loading with the cross loading (Joseph F Hair, Ringle, & Sarstedt, 2013).

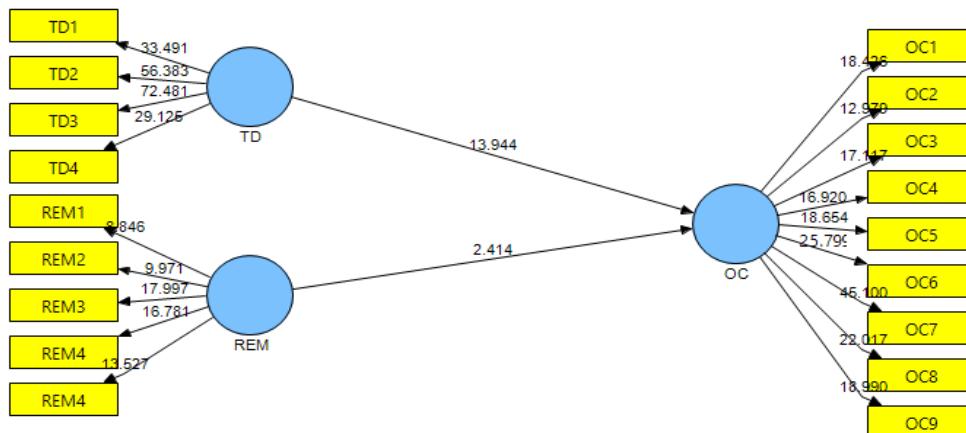
**Table 2:** The Square Root of AVE and the correlations of the latent variables

	OC	REM	TD
<b>OC</b>	<b>0.723</b>		
<b>REM</b>	0.170	<b>0.843</b>	
<b>TD</b>	0.590	0.129	<b>0.846</b>

As reported in Table 2, the diagonal values (square root of AVE of the respective constructs) are greater than the other values of the column and the row in which they are situated, confirming the discriminant validity of the outer model (Joseph F Hair et al., 1998).

### 3.3. Structural Model

The results of structural model are presented in Table 3 and Figure 2, below.



**Figure 2:** Structural model

**Table 3:** The result of Structural Model

	Original Sample (O)	Standard Error (STER)	T Statistics ( O/STER R )	P- valu e	Decisio n
Remuneration -> Organizational Commitment	0.0954	0.0395	2.414	0.01* **	Support ed
Training and development -> Organizational Commitment	0.577	0.0414	13.944	0.00*	Support ed

Note: \*\*\*p<0.001 -> significant at 0.01 (1 tailed)

There is significant relation between remuneration and OC; and T&D and OC. Table 3 shows that beta=0.0954, t-value=2.414 and p-value<0.01, suggesting that there is a positive and significant relationship between remuneration and OC. Furthermore, table 3 shows that relationship between T&D and OC is positive and significant at beta=0.577, t-value=13.944 and p-value<0.00. Furthermore, the R<sup>2</sup> value was 0.35 which suggests that the modelled variables can explain 35% of the variance of the OC.

### 3.4. Assessment of Effect Size ( $f^2$ )

This study assesses effect size for criterion construct.  $F^2$  shows the effect of particular criterion variable on predictor construct (Chin et al., 2003). Hence, effect size can be calculated as (Callaghan, Wilson, Ringle, & Henseler, 2007; Cohen, 1988):

$$\text{Effect size: } f^2 = \frac{R^2_{Included} - R^2_{Excluded}}{1 - R^2_{Included}}$$

$R^2$  included and  $R^2$  excluded represent  $R^2$  value of the exogenous latent variable when selected exogenous variable is included or excluded from the model. Cohen (1988) Suggested that  $f^2$  value of 0.02, 0.15 and 0.35 as weak, moderate and strong effect respectively. Table 4 shows the calculation and the result of the effect size of each of latent variables.

**Table 4:** Effect Sizes on Exogenous Construct

	<b>Included</b>	<b>Excluded</b>	<b>f-squared</b>	<b>Effect size</b>
<b>R-squared</b>	0.356	0.047	0.4798	Large
<b>R-squared</b>	0.356	0.351	0.0078	None

As shown in Table 4, the effect size of the exogenous construct (remuneration and T&D for explaining OC (the endogenous variable) have effect size of 0.479 and 0.007 respectively. Thus, applying the Cohen's (1988) recommendation, the effects sizes of all the exogenous latent variables on OC can be considered as large and none respectively.

### 3.5. Assessment of Predictive Relevance

After evaluating effect size the current study also assessed predictive relevance technique as suggested by (Joseph F Hair et al., 1998). For this purpose the current study used blindfolding. Similarly, blindfolding method only used for reflected measurement model (Sattler, Völckner, Riediger, & Ringle, 2010). Thus, in the current study all the endogenous latent variable were reflective. Therefore, blindfolding procedure was used. Similarly, the cross-validated redundancy measure ( $Q^2$ ) was used to probe the predictive relevance (Joe F Hair et al., 2011; Henseler & Chin, 2010). According to Henseler, Ringle, and Sinkovics (2009) have predictive relevance the redundant communality should be higher than zero for endogenous variables.

**Table 5:** Construct Cross-Validated Redundancy

<b>Total</b>	<b>SSO</b>	<b>SSE</b>	<b>1-SSE/SSO</b>
OC	1980.000	1649.589	0.167

As shown in Table 5 the cross-validated redundancies for the endogenous variables are 0.167. This value reveals sufficient predictive capability of the model based on Fornell and Cha (1994) standards which required these values to be larger than zero.

#### 4. Discussion

This study aimed to probe the effect of remuneration and T&D on the OC of academic staff of public HEIs in Pakistan. The outcome of this study validated that there is imperative association between the remuneration and OC. The outcome of this study is also in accordance with previous studies such as (Khan et al., 2013; R. Saeed et al., 2013). This suggests that when academic staff receive adequate remuneration or pay from their institute, there are fair chances that academic staff will show positive behaviour toward organization, be committed and stay longer with the organization. The notion of the social exchange theory (SET) also highlights that when institute provides adequate support for the benefit of the academic staff, they respond in positive feedback toward university (Tansky & Cohen, 2001).

The outcomes in current study also show imperative association between the T&D and OC. The outcomes are consistent with the finding of previous research (K. Z. Ahmad & Bakar, 2003; Al-Emadi & Marquardt, 2007). This suggests that if employees receive proper training programs from their organization, this may help to improve their skills and cope with new technological change, employees feel that organization cares about them, which leads towards OC. SET also supports the findings, according to which if employees received support from organization in result they feel motivated and it enhances their commitment level toward their organization as stated by (Newman, Thanacoody, & Hui, 2011).

##### 4.1. Implications

The findings of the current study provide empirical evidences theoretically, the correlation among remuneration, T&D, and OC. The findings of the current study also add to the literature on remuneration, T&D and OC. The research findings validate the notion that remuneration and T&D is contributing significantly by increasing OC among all the academic staff which can lead to practical implication to support the policy makers and practitioners.

There are some implications for HR managers and policy makers of public HEIs of Pakistan based on the above discussion and findings. First, the imperative association between remuneration and OC concluded that remuneration is one of the vital components in enhancing OC. Remuneration is a very vital aspect of workforce motivation (Chiang & Birtch, 2010). Therefore, appropriate remuneration can play a vital role to attract and enhance the academic staff commitment level. Second, the imperative correlation between T&D and OC suggests that T&D is a significant stable factor in enhancing the OC level among academic staff. The administration of public HEIs needs to assure that there is adequate remuneration and proper training program

for the employees. The finding forwards view for the organizations to realize the potential of training on organizational commitment and highlights the idea of developing responsive development strategies for employees in this regard.

Present framework of the study is a way forward to the managers related to the needs to enhance the academic staff commitment level. Based on the SET theory, when organizations offer positive HRM practices, employees perceive those practices as the recognition of employees' efforts, and thus they stay for longer period of time with the institution.

In conclusion, it can be argued that the public universities management should pay more attention to proper compensation, and sufficient opportunities for training to increase the academic staff commitment level and retain the potential academic staff and get competitive advantages in the future. In summary, the present study has added valuable theoretical and practical understandings to the growing body of knowledge.

#### **4.2. Limitations and suggestions for future research**

As this study highlights key factors in enhancing the employee commitment, there are still some limitations. First, the sample in this study only consists of academic staff in KPK, Pakistan. Hence, future research may be expanded to other areas of Pakistan. Second, only the academic staffs were the respondents in this study. The effectiveness of the organization HR practices may be evaluated on the non-academic staff for future research. Investigation into different industries and sectors (e.g. manufacturing sector and services sector) may also be considered to have a more holistic and diverse look at employee commitment.

Third, the present study considered cross sectional approach. However, in future longitudinal research method may be considered to find out the impact of HR practices for the same. Fourth, the present study examines the commitment of academic staff working in public universities. Therefore, future study should consider private universities in the organizational commitment research as may support researchers in future to compare and contrast findings for better statistical understanding.

Finally, present study employs only two HRM practices (i.e. remuneration and T&D) to study OC. Further study may consider other factors which are known to have an impact on OC such as leadership styles, promotional opportunities, and retention.

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## Relationship of Abusive Supervision and Creativity of Academic Staff in Public Sector Universities: Mediating role of Knowledge Sharing

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### Abstract

The importance of knowledge management enhances the competitive advantage of an organization in today's knowledge-based economy is agreed upon. In this era of globalized economy, knowledge is the main driver for growth. Knowledge promotes creativity is proved in the extant literature which is effected by abusive supervision. In this present study, we examine the process through which abusive supervision affects the creativity of employees. In particular, with the likelihood that abusive supervision is related to creativity of the employees and mediated by knowledge sharing behavior. Thus, the aim of present study is to investigate the effect of abusive supervision on the creativity of academic staff in the public sector universities with the mediating role of knowledge sharing. In order to analyze the relationship among the variables involved in the study, utilized the quantitative research methodology, deductive approach and cross-sectional time horizon .The questionnaire survey technique was adopted to collect the data. A five-point Likert scales with significant measures was used. The targeted population of the present study was the academic staff of three universities (Lahore College for Women University, The University of the Punjab, and Government College University, Lahore). Total 330 employees were selected as a sample through utilizing the proportionate stratified random sampling technique and among them 298 was fit for the analysis. The statistical tool, SPSS and AMOS was utilized to analyze the collected data to obtain the results. The results of the study show that abusive supervision has a negative effect on employee creativity and knowledge sharing of employees whereas; knowledge sharing has significant positive effect on employee creativity. Though, knowledge sharing is partially mediating the relationship between abusive supervision and knowledge sharing.

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**Keywords:** *Abusive supervision, Creativity, Knowledge sharing, public sector universities.*

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### 1. Introduction

In 1947, when Pakistan was established, the educational resources allocated to West Pakistan in the form of established institutions were very small, compared to the resources allocated to India. Although in both developed and developing countries, it is a fact that the performance of educational institutions depends on their ability to attract, <https://doi.org/10.30537/sijmb.v4i2.110>

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retain and maintain their academic staff. Knowledge management has been perceived as essential segments for the survival of institutions. Employees who hold knowledge can be utilized to enhance knowledge advancement and can influence information. The exchange of knowledge is a process of sharing thoughts, facts and information and is a useful interaction of people. It is an activity where people exchange knowledge and create a new one. Knowledge sharing enhances creativity among employees due to mutual sharing of information. Creativity is the development of innovative and functional ideas about products and services; processes and actions and become more fundamental for the continued existence and competition of today's organizations. Employee creativity is facilitated by supervisory support, feedback and self-efficacy and inhibited by abusive supervision in organizations.

It is generally perceived that education is the most capable force in reducing poverty, raising financial development, delivering talented human assets, making solid and illuminated social conditions and creating self-sufficient organizations. According to Noordin and Jusoff (2009), institutions can satisfy their academic staff through well-organized working conditions because the expectations of society depend on the success of the higher education system and this educational system becomes more successful due to the effort, support and participation of academic staff. It is not unbelievable that organizations are struggling to create a viable knowledge management considering the ultimate goal of encouraging people to share their knowledge(Pais & Santos, 2015). Knowledge management is fundamentally based on making accurate knowledge. Therefore, knowledge sharing is the most substantial stage of the procedure. French, Raven, and Cartwright (1959) Stated that knowledge is measured as a basis of power. However, few studies have investigated the effect of practices that may decrease employee knowledge sharing behavior .People do not generally share their knowledge and they will not share as much as the organization might want from them. According to (Bock, Zmud, Kim, & Lee, 2005; Ryhammar & Brolin, 1999) the academic institutions tends to depend more on the exchange of knowledge, but surprisingly very few studies have examined the objective of sharing knowledge of academic staff in higher education.

In today's innovation-driven economy, creativity is the key to expand the competitive advantage through which firm can sustain in the speedily fluctuating surroundings. Employee creativity has been preserved very necessary for the persistence and competition of the organizations (Shalley, Zhou, & Oldham, 2004). Creativity refers to the creative capacity to start or create new thoughts and ideas.

The specified objectives of the current research study were as follows:

- To find out the relationship between abusive supervision and employee creativity in public sector universities
- To investigate the effect of abusive supervision on knowledge sharing
- To investigate effect of knowledge sharing on Employee Creativity

- To study the mediating role of knowledge sharing among abusive supervision and employee creativity

The current study emphasizes overcoming the study gaps, since a central part of past studies has been taken into account considering the relationship between employee creativity and innovation in the business and hospitality sector (Hon, 2013; Hon & Lu, 2015; Janssen, 2003). These studies, however, have been directed towards the call for future researchers within different sectors. So this research has been directed according to previous studies on the relationship between abusive supervision and creativity of employees in the higher education sector that is limited(Amabile, Schatzel, Moneta, & Kramer, 2004; Mumford, Scott, Gaddis, & Strange, 2002).

## **2. Literature Review**

### **2.1. Abusive Supervision**

Tepper (2000) characterized the abusive supervision as representative's views on the degree to which his supervisors show i.e. forcefully treating verbal and non-verbal practices. Abusive supervision comprises a wide variety of practices. A supervisor who repeatedly criticizes workers against others, unduly blames the representatives, discourteous to the workers, rude and inconsiderate, unjustifiably assumes credits, shouts at workers, attacks the protection of workers or uses coercive strategies can be considered abusive (Tepper, 2000; Tepper, Duffy, Henle, & Lambert, 2006; Tepper, Moss, & Duffy, 2011).Martinko, Harvey, Sikora, and Douglas (2011) stated that abusive supervision is a subjective evaluation directed by the observation of subordinates; considering all aspects, it is conceivable that subordinates can see the behavior of a supervisor in different ways, but not all abusive supervision is seen. Past researchers have noticed that between 10% to 16 % workers frequently experience abusive supervisors (Duffy, Ganster, & Pagon, 2002; Namie & Namie, 2009).In addition, abusive supervision offers rise to authoritative insufficiency, nonpresence and turnover.In this way, abused employees who cannot expect a sufficient level of substantial or elusive assets from their abusive supervisors will likely have low levels of shared knowledge. Mackey, Frieder, Brees, and Martinko (2017) Find out the antecedents and outcomes of abusive supervision by using psychometric correction.

### **2.2. Knowledge Sharing**

Knowledge is a necessary power for learning organizations in current globalization. It is assumed that knowledge is appreciated in institutions to manage and maintain position in the market. Fundamentally, knowledge is identified with learning employees. They are people who have knowledge, great capacity, competence and are extremely bright in business. The role of the knowledge worker in the institution fosters the issues that depend on a choice, methodologies, business instructions and rivalry among other businesses. This implies that knowledge management among workers generates learning conditions, discussions, administration and undetectable advantage

for institutions. The need to monitor knowledge more adequately is necessary to adapt to changes in a focused situation. The progression requires the availability of changes from both mental and auxiliary measurements for knowledge acquisition, construction and exchange procedures (Rusly, Yih-Tong Sun, & L. Corner, 2014).

Lin, Wang, and Chen (2013) argued that the interest in innovation generally does not guarantee an effective knowledge management, it is relatively guaranteed that the main pillar of success responses is the willingness and responsibility of employees to participate in activities. Despite the increasing prominence of knowledge sharing practices for hierarchical intensity and market execution, few obstructions make it problematic for knowledge management to achieve the objectives and improve the aggressiveness and the inclusive benefit of the organization. Knowledge sharing demonstrates intense procedure of knowledge interchange and learning, a process that incorporates two dimensions' knowledge donating and knowledge collection (Foss, Husted, & Michailova, 2010).

### **2.3. Employee creativity**

The word creativity is derived from the Latin word "Creatus" or "Creare", means to make. So, creativity refers to the creative capacity to start or create new thoughts and ideas. Morgan (1953) Stated the broad component of the creativity is novelty. Novelty requires innovation, originality and newness. There must be something new in the idea. According to the Amabile (1996), creativity usually denotes the creation of the untested and valuable concepts through an individual and a group of persons employed together. Creativity has a vital role in the process of innovation (Serrat, 2017).

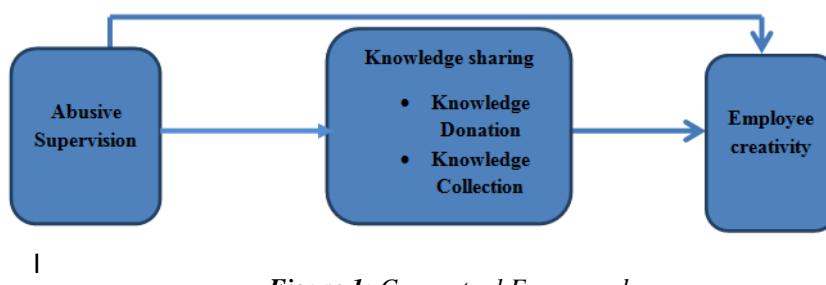
The principal of any society lies in talent and encouragement; the development of talent contains the mobilizations of cultural societies, accumulating capital through the construction of institutions, improving the quality and values that favor achievements and ideas. The results of that are achieved from the talent that can be referred to as a new idea or creativity.

Zhou and Shalley (2003) Stated that many theorists define creativity as the improvement of thoughts about objects, services, practices, and procedures which are not only novel and unique but also useful to the institutions. Accordingly, novelty and originality are two important attributes of an idea to be judged as creative. People might have queried that to be considered as creative, an idea ought to have some possessions of being novel and originality. Although novelty is just not enough, in the milieu of work creativity, an idea should contain the possession of being functional in order to be measured. Even

though the idea which is novel, but there is lack of potential values is considered only rare but not creative.

### 3. Conceptual Framework

The research model presented below synthesizes independent variable abusive supervision towards dependent variable employee creativity, mediated by knowledge sharing respectively.



**Figure 1:** Conceptual Framework

The extensively held research study that has investigated the antecedents of employee's creativity, have searched that the supervisor's positive conduct is a key antecedent of employee creativity (Tierney, 2008). According to Liu, Liao and Loi (2012); Zhang, Kwan, Zhang and Wu (2014) a very few research studies have explored the impact of abusive supervision on employee creativity. They found that abusive supervision is adversely related to employee creativity, whereas other researchers found that abusive supervision takes an inverted-u effect on creativity of employees. Lee, Yun, and Srivastava (2013), proposing that high or low level of abusive supervision would obstruct employee creativity, and reasonable level of abusive supervision benefit employee creativity. Subsequently, it is important to retest the association between abusive supervision and subordinates or employee's creativity.

Employees with high knowledge sharing will probably prepare their imaginative capabilities into innovative results. Wang and Noe (2010), proposed that knowledge sharing assumes an integral part in expanding employees creativity. Chang, Gong, and Peng (2012) in their studies suggested that information sharing practices could have a main effect on employees creativity. The lesser figures of studies address the issue of creativity through knowledge sharing in Pakistan's viewpoint.

#### **4. Research Methodology**

Quantitative research methodology is used in this current study. In quantitative method, results are based on numbers and figures which are statistically measured and analyzed. Moreover, in the quantitative research, the hypotheses are derived through past literature support and instruments used for measurement are adopted from the past studies as well. The basic objective of this present research is to test the hypotheses that whether the employee creativity is affected by abusive supervision and either knowledge sharing mediates this relationship or not. The data has been collected through survey and different statistical test was used to analyze the data and to conclude results.

##### **4.1. Population**

The present study has been conducted in public sector universities of Lahore because Lahore city is famous for its academia. So it is important to evaluate the reliable sector to examine the effect of abusive supervision on creativity of academic staff or to explore the mediating behavior of knowledge sharing. In this regard we choose three renowned public sector universities as population which are University of the Punjab, Government College University and Lahore College for Women University. The logic of choosing the three institutions was that they have been providing quality education for the previous several years in different disciplines and teaching values in the young group of Pakistan.

##### **4.2. Sample size and data analysis technique**

In order to conduct a quantitative research, it is referred to Alreck and Settle (1985) that the sample size must be around 300. For data collection, self-administered questionnaires were used. A total of 330 questionnaires were distributed. Among them, 155 questionnaires were distributed in the University of the Punjab, 76 in Government College University and 99 in Lahore College for Women University. Total 298 questionnaires were received to be fit for analysis. Thus the actual size for analysis was 298 questionnaires that comprise of 90% response rate. Stratified propionate sampling was used in the study for questionnaire distribution and data collection.

##### **4.3. Hypothesis:**

**H1:** *Abusive supervision has significant negative effect on employee's creativity.*

**H2:** *Abusive supervision has significant negative effect knowledge sharing.*

**H3:** *Knowledge sharing has significant positive effect on employee's creativity.*

**H4:** *The effect of abusive supervision on creativity is mediated by knowledge sharing.*

#### **5. Data Analysis and Results**

Before starting the primary information investigation, information was examined for any potential missing data and amendment were made of any conceivable mistake in accumulated information. In any case, it is troublesome for a researcher to assemble an

extensive arrangement of information with no missing qualities (Hair Jr, Black, Babin, & Anderson, 2010). The mean score substitution method was used to replace the missing data of survey questionnaires (Tabachnick & Fidell, 2001). Descriptive statistics of demographic characteristics were employed, which includes age, gender, qualification, designation and job experience. The gender demographics show that the major part of the survey was covered by female 158(53%), whereas 140(47%) were male respondents in the survey. Moreover, the age descriptive figure represents that majority of the respondents lie in the age range of 21-30 with 124(41%). Whereas, 109(36.6%) respondents fall in the age group of 31-40 years of age. The qualification descriptive statistics directs that majority of the respondents 188(63.1%) hold MPhil degree whereas 77(25.8 %) respondents had Ph.D. degrees. The designation descriptive statistic indicated that majority of the respondents in the survey were 160(53.7%) lecturers. However, 67(22.5%) were assistant professor, 45(15.1%) were teaching assistants, 18(6%) were associate professor and 8(2.7%) were professors in this study. Job experience descriptive statistics indicated that majority 134(45%) of respondents have 1-4 years' job experience; however, 81(27.2%) respondents have 5-9 years of job experience. Stratified propionate sampling was used to select the sample.

### 5.1. Procedure

For data analysis purpose SPSS and AMOS (Version 22) is used. There are different steps in the analysis phase. In the first step, data screening have been done in order to check the missing values. It includes descriptive statistics, normality, homogeneity, and correlation analysis.

### 5.2. Measurement Model

With the purpose to conclude the internal reliability of variables, the Cronbach's alphas with factor loading values have been measured by utilizing SPSS. The edge value of the Cronbach's alpha value should be 0.70 or greater than 0.70 for all constructs. Thus, as provided by the table 1 all values of Cronbach's alpha are above than 0.70. So it is evidenced that all the included variables have fulfilled the reliability issue.

**Table 1:** Cronbach's alphas with factor loading

S #	Variables	Cronba ch's	No. Item s	Factor loading
1	Abusive supervision	.844	14	0.60,0.60,0.75,0.77,0.81,0.82,0.82,0.74,0.66,0.73,0.7 10.76
2	Employee creativity	.870	11	0.77,0.63,0.79,0.70,0.63,0.72,0.78,0.72,0.71,0.73
3	Knowledge sharing	.835	8	0.80,0.75,0.67,0.71,0.72,0.70

The next phase is to decide the convergent on the discriminant reliability of measures utilized. Fornell and Larcker (1981) Stated that three stages process are used to check the validity concerns. First, all the factor loading values ought to be greater than 0.50 which has been proved by the existing framework. Secondly, the composite reliability of all variables ought to be greater than 0.50. Farrell (2010) Stated that composite reliability was anticipated method used to determine the standard reliability of accrual of heterogeneous but related measures. So critical ratio (CR) measures have been used to affirm internal consistency of variables along with its dimensions. The CR values were AS=0.933, EC=0.914, KS=0.870 and all values are greater than 0.5 which satisfy all validity of scales. Moreover, with the aim to conclude discriminant validity, Hair Jret al., (2010) suggested that average variance extracted (AVE) ought to be greater than 0.5(minimum level). The attained results of AVE values lie between the ranges of 0.528 to 0.541 that is greater than 0.5 which is minimum level and approve the discriminant validity of current study variables shown in Table 2 below.

**Table 2:** Composite Reliability

	<b>CR</b>	<b>AVE</b>	<b>MSV</b>	<b>ASV</b>	<b>AS</b>	<b>EC</b>	<b>KS</b>
<b>AS</b>	0.933	0.541	0.020	0.011	0.157		
<b>EC</b>	0.914	0.517	0.294	0.148	-0.043	0.719	
<b>KS</b>	0.870	0.528	0.294	0.157	0.142	0.542	0.726

After reliability checking out of the objects, the focal point is to measure the convergent along with discriminant validity and reliability thus relying on CFA (Goodness of fit measurement model).

### 5.3. Goodness of fit.

**Table 3:** Summary of goodness of fit

<b>Fit Indices</b>	<b>x<sup>2</sup>(df)</b>	<b>p-value</b>	<b>GFI</b>	<b>AGFI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>CMIN/DF</b>
				<b>TLI</b>			
<b>Value</b>	996.92	.000	0.871	0.845 0.920	0.899	0.077	2.97
<b>Suggested value</b>		<.05	>.80	>.80 >.90	>.90	< .07 or < .10	>.90

The suggested model for the research study represents significant results and the output obtained from AMOS which is model fit indices shows reasonable fit for gathered and analyzed data. The values presented in current research fulfill the criteria of best fit. The chi- square value (df) value along with p significant value of 996.92(336), p=.000 and other fit indices. According to Bollen (1989) the CFI value needs to be greater than .80, and in present study, the value is 0.899 (CFI=0.899).

Moreover, RMSEA value should be  $<.07$  or  $<.10$  (Hair Jr et al., 2010; Kline, 2011) in the present study its value is  $.077 < .10$ . According to Baumgartner and Homburg (1996) the value of goodness of fit index (GFI) and aggregated goodness of fit index (AGFI) should be greater than  $.80$  and in the present study the values were  $.871$  and  $.845$  respectively.

Furthermore, the value of Tucker-Lewis co-efficient (TLI) must be  $>0.9$  Kline (2011) which are  $.920 > 0.9$  for the current study. According to Carmines and McIver (1981) the value of CMIN/DF is in the range of 2 to 1 and 1 to 3 are an acceptable fit so in the present study the value of CMIN/DF =  $2.97$  which shows the model is fit. So these all values fulfill the criteria of goodness of fit model. So it is concluded that the hypothesized model provides a suitable model for analysis. Furthermore, the results of the study verify that the convergent as well as discriminant validity issue has been fulfilled.

#### 5.4. Structural equation modeling (SEM)

After accessing and acquiring the satisfactory fit indices of measurement models the next step is to run SEM to test the hypothesized relations between variables. Byrne (2010) stated that SEM displays the association among variables that shows the path analysis between variables underused. The model suggested in this study measures the effect of abusive supervision on the creativity of academic staff. The fundamental associations identified in the hypothesis (H1-H4) and standardized regression weights of identified model and p-value are utilized to measure the significance of these hypotheses. That was confirmed by the depiction of structural equation modeling. The analysis expedites with the results appropriateness determination and hypothesis testing. All the acquired results linked with the hypothesis directed to the approval of involved hypothesis composed a popularity of causal linkage among variables after observation.

**Table 4:** Path Analysis Obtained from Structured Equation Modeling

		Estimate	S.E.	Standardized $\beta$	P
AS	<--- EC	-.118	.055	-2.134	.033
AS	<--- KS	-.100	.047	-2.102	.036
KS	<--- EC	.553	.071	7.780	***

Note: \* =  $p < 0.05$ , \*\* =  $p < 0.01$ , \*\*\* =  $P < 0.001$

**Regression Weights:** (Group number 1 - Default model)

#### 5.5. Hypothesis testing

The regression standardized weights with values of standard error represents the significance of the understudy variables. The results of the study prove that Abusive supervision (AS) has significant negative effect on Employee Creativity (EC) along with values (Standardized  $\beta=-2.134$ , S.E.=.055,  $p<0.05$ ( $0.03<0.05$ ) that supports H1.

Second, results values shows that Abusive supervision (AS) has significant negative effect on Knowledge sharing (KS) with values (Standardized  $\beta=-2.102$ , S.E=.047,  $p<0.05(0.03<0.05)$ ) that support H2 to be true and further proves that abusive supervision decrease knowledge sharing intention. Furthermore, results represent that knowledge sharing has significant positive effect on employee creativity with values (Standardized  $\beta=7.780$ , S.E=.071,  $P < 0.001$ ) that prove H3 to be true.

### 5.6. Mediation Analysis

In the analysis, the next step is to determine the mediation relationship hypothesis. In this regard, four-step methods have been used (Baron & Kenny, 1986). According to Baron and Kenny (1986) there are three types of mediations including full mediation, partial mediation, and no mediation. Three paths are connected with direct effects where one path is connected with indirect effect. These paths include effects of independent towards dependent, the effect of independent towards mediator, the effect of mediator towards dependent and the effect of independent on dependent through the mediator. In a case where direct and indirect effects both are significant, the partial mediation exists, and in a case where indirect effects are insignificant and direct effects is significant the full mediation exists.

**Table 5:** Direct and Indirect Effects

Direct Effects	Standardized	Unstandardized
AS → EC	-.122 **	-.100 **
AS→ KS	-.142 **	-.118 **
KS→ EC	0.610 ***	0.047 **
Indirect Effects	Standardized	Unstandardized
AS → KS→EC	-.031**	0.048 *

**Note:** \* =  $p < 0.05$ , \*\* =  $p < 0.01$ , \*\*\* =  $P < 0.001$

### 5.7. Conditions

The results presented in above Table 4 prove that Knowledge sharing (KS) partially mediate the relationship between AS and EC by fulfilling the direct and indirect paths effect. This is proved by significant effects of AS on EC values of ( $\beta=-.122$ ,  $p<0.01$ ), significant effect of AS on KS (independent on mediator) along with values ( $\beta=-.142$ ,  $p < 0.01$ ); KS on EC (mediator on dependent) with values ( $\beta=0.610$ ,  $p < 0.01$ ) and AS shows significant effect on EC through mediator KS with values ( $\beta=-.031$ ,  $p < 0.01$ ). Negative signs indicate the negative relations among variables. To get the clearer image of the indirect effects constructs over each other the bootstrapping of 2000 samples were also used. The above-mentioned table shows the results of bootstrapping which further support the H4 that determine that knowledge sharing mediates the relationship between abusive supervision and employee creativity. In the present study, partial mediation exists because both direct and indirect effects are proved to be significant.

**Table 6:** Hypothesis status

Reno	Hypothesis	Status
1	AS has a significant negative effect on EC.	Accepted
2	AS has a significant negative effect on KS.	Accepted
3	KS has significant positive effect on EC	Accepted
4	AS and EC partially mediated by KS.	Accepted

## **6. Limitations of the study**

Regardless of the contribution of the portfolio made by this research in practical and theoretical aspects. There is some limitation regarding the size of the sample and the generalization of the investigation. This study also has some limitations that can be incorporated in the future research. The limitations that the platform offers to the future researchers are the following. This study is carried out only in three public sector universities in Lahore, so it is not a comparative study. Generalizability of this research is small since information for this examination was gathered from a solitary division and from single city; the future researcher may collect data from multiple sectors and cities. The results of the study can not be generalized to another sector due to the absence of diverse geographical locations. This study is carried out at the individual level, but it can also be implemented at the team level. Data is collected through questionnaires from academic staff, the future researchers can use multiple approaches to collect data from multiple respondents, such as managers, bank employees and front-line employees. In addition, the present study may be replicable in different sectors and different countries as well.

## **7. Discussion and conclusions**

The main objective of this study is to investigate the effect of abusive supervision on the creativity of academic staff in public sector universities. In addition, the current research emphasizes the role of mediation by the direct and indirect effects of knowledge sharing. The results of this study also support previous studies that abusive supervision negatively affects the creativity of academic staff.

Wilk and Moynihan (2005) argued that there are some resources that are accessible to employees which include characteristics such as capabilities and self-respect, social support from associates, co-workers, directors and others, individual control on the job, and contribution in decision making procedure. At the point where abusive supervision is available, it is likely that these estimated assets will be lost. Initially, abused employees are, by definition, likely to have limited support from employers. Supervisor support is the most helpful and vital social assets in a working environment, absence of supervisor's support could be a basic obstruction to encouraging employees to take part

in deliberate activity, such as knowledge sharing (Aryee, Chen, Sun, & Debrah, 2007). In this study we examined, how abusive supervision affects creativity of academic staff. First, we found that abusive supervision negatively affected creativity of academic staff. Second, there was an evidence that abusive supervision is also negatively related to knowledge sharing. Third, knowledge sharing was positively related to employee creativity. Last, we found that knowledge sharing partially mediated the relationship between abusive supervision and employee creativity. According to the assumption related to abusive supervision, it is found that abusive supervision leads to lower the knowledge sharing behavior of employees. Because when employees face abusive supervisory behavior, they can resist knowledge sharing. When employees encounter abusive supervision they tend to avoid knowledge sharing. In this way, the research findings were found in the trajectory of previous results that represented a negative association between abusive supervision and knowledge sharing (Aryee et al., 2007; Lee et al., 2013).

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## Validation of SERVQUAL Model in Relation to Customer Loyalty: Evidence from FMCGs in Pakistan

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### Abstract

The aim of this study is to make a scientific contribution to understanding the relationship between SERVQUAL model and customer loyalty. The primary objective is to examine the composite relationship between SERVQUAL model and customer loyalty from the perspective of FMCG customers. The second objective is to investigate the relationship between each dimension of the SERVQUAL model in relation to customer loyalty. Through the self-rated survey, data was collected from the 400 walk-in customers of FMCG firms. Using PLS-SEM approach, the validation of SERVQUAL model was analyzed in relation to customer loyalty. Also, the influence of each dimension of service quality on customer loyalty was examined. The findings of primary objective revealed that the SERVQUAL model is significantly and positively linked to the customer loyalty. Further, the findings of the second objective revealed that each dimension of the SERVQUAL model has a significant relationship with the customer loyalty and depicts noteworthy contribution of service quality in literature. These findings suggest that SERVQUAL model is capable of being effectively used to evaluate the service quality in the FMCG market of Pakistan. Implications and future opportunities of the study are discussed.

**Keywords:** SERVQUAL, Service Quality, Customer Loyalty, Fast Moving Consumer Goods, PLS-SEM.

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### 1. Introduction

This study aims to investigate the validation of SERVQUAL model and its relationship with the customer loyalty in the Fast Moving Consumer Goods (FMCG) market in Pakistan. The term FMCG refers to those products or goods which can be consumed wholly or in part over a short period of time like in a few days, weeks, months, and/or within a year of purchase (Moolla & Bisschoff, 2012). The products under FMCGs have a very short shelf-life due to high consumer demand based on the quality of product or service and/or the rapid deterioration nature of the products (Moolla & Bisschoff, 2012). Likewise, the core focus of the FMCG firms marketing activities is to develop, maintain, and enhance the customer's loyalty towards its marketed products or services (Ngobo, 2017). So, the increasing unpredictability, product differentiation, and high

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competitive pressure have increased the importance of customer loyalty in the FMCG marketplace.

According to the Economist (2013), FMCG firms have a scope of growth in Pakistan market. This is also evident from the Pakistan Economic Survey (2017) which revealed a significant growth of 9.65 percent in the FMCG industry of Pakistan. There are numerous reasons for this, but importantly Pakistan's growing population and its major portion were emerging middle-class consumers (Economist, 2013). In Pakistan, various multinational and national FMCG firms are operating and heavily invested in its production and distribution. Even though there numerous FMCG firms are operating in Pakistan, there is a strong scope of growth in terms of market share which can be increased by understanding consumers and distributing the right products and brands through service quality (Economist, 2013). Further, Shazia Syed, a CEO of Unilever Pakistan Limited also stated that "*most importantly, the local industry needs to step up cost efficiencies and quality standards in order to survive in this new competitive world*". She further stated that "*the FMCG sector is also confident of growth being fueled by rising consumer confidence*" (News, 2017). Therefore, there is a need that FMCG firms should focus on its quality standards which can be maintained through the delivery of service quality.

In the recent past, the notion of service quality has been very lucrative for management executives and researchers on account of its powerful influence on organizational performance, cost reduction, consumer delight, consumer faithfulness and overall success of the business (Gupta, Si, & Si, 2016; Gurău, 2003; Sureshchandar, Rajendran, & Anantharaman, 2002). Chou, Lu, and Chang (2014) noticed an unbroken chain of research studies conducted refining the conception, modeling, assessment, research procedure, and the data assessment phenomenon regarding service quality, which has been leading the researchers for the establishment of a mature foundation in this pertinent area (Seth, Deshmukh, & Vrat, 2005). In addition to that, the service quality has remained an attractive area for academicians as well as marketing managers because of the crucial role of service staff in the process of rendering services leading to customer retention and loyalty (F. Ali, Zhou, Hussain, Nair, & Ragavan, 2016; M. Ali & Raza, 2017).

The conceptualization of service quality can better be explained by considering the concepts of service and quality separately. The service quality is composed of two separate but mutually complimenting components, which is firstly the service and secondly the quality. The services tend to be the intangible behavioral beings rather than physical units and can be portrayed as the performances, conduct, actions, and procedures. Whereas the quality is deemed as a customer's judgment of the level to which the actual delivered product or service meets his or her anticipated belief (Singh, 2016). Precisely, the conception of service quality may be considered as the level of disparity between customers expected level of service performed prior to coming across

that service, and their views of the actual service encountered (Asubonteng, McCleary, & Swan, 1996; Zargar, 2016).

More recently, a product quality, process quality and the total quality management have become a primary concern in the FMCG and manufacturing region, and *service* is now recognized to be critical for all organizations (Ahmed, 2016; Lewis, 1993). The firms offering finer service are evidently found with growing market share, leading to soaring levels of profits via premium prices thus, the firms with better service quality are reported to realize an 8 percent increased price premium than their competitors (Buell, Campbell, & Frei, 2016; Ofori, Boakye, & Narteh, 2016). Besides, the extension of good word of mouth of the happy customers is an additional consequent benefit of superior service (A Parasuraman, Berry, & Zeithaml, 2002). Subsequently, the service quality is acknowledged as a captivating competitive strategy, benefiting to both counterparts that are the service providers and their clients, generating interactive intentions of customers to further advocate the firm positively which ultimately leads to profit multiplication to the firm (Ahmed, 2016).

Different researches conducted at different times have been portraying the high correlation found between the customer satisfaction and their positive intentions for good word of mouth (M. J. Chang, Kang, Ko, & Connaughton, 2017; Hartline & Jones, 1996). Such sort of positive intentions on behalf of satisfied customers is indispensable for the firm's survival because these regarded as a symbol of customer loyalty (Akbar & Parvez, 2009; Ammar Ahmed, 2016). Therefore, it is found that the ensuring service quality by the FMCG firms, in particular, would increase the customer orientation positively about the firm and take the firm towards generation of the positive word of mouth, greater perceived reliability of the firm's products leading to customer satisfaction with a resulting customer loyalty (Ahmed, 2016).

Moreover, service quality is recognized as a key feature for any organization to gain a competitive advantage via sustainable customer relationships (Wilson, Zeithaml, Bitner, & Grempler, 2016). The quality of the services appears as the main cause to improve the bottom-line performance of any firm resulting in exceeding the perceived level of service desired by customers (Chumpitaz & Paparoidamis, 2004). In order to measure the service quality, a group of prominent researchers V. A. Z. Parasuraman, Berry, and Zeithaml (1988) has operationalized it as a five-dimensional construct consisted of tangibility, reliability, assurance, responsiveness, and empathy.

This article is particularly concerned with the validation of a service quality construct 'SERVQUAL' with an explicit focus on the FMCG industry of Pakistan. Previously published studies regarding the applications and usefulness of SERVQUAL have been conducted in the developed countries like USA, Canada, North America, Australia, Hong Kong, India and Singapore, and in context of retail banking, telecom sector, hotel industry, transportation industry, healthcare, tourism industries (Gupta et al., 2016;

Turel & Serenko, 2006). Furthermore, a considerable amount of literature has been published on customer loyalty (Leahy (2009); Molla and Bisschoff (2012)), however, a little attention has been paid towards the examination of SERVQUAL model and its relationship with the customer loyalty in the FMCG market in Pakistan. Therefore, this study aims to provide the empirical evidence by validating the SERVQUAL model in the developing country FMCG market context and also its significant role in the development of customer loyalty which also bridges the literature gap. Put differently, there are two objectives of this study,

- i) To investigate the relationship between SERVQUAL model and customer loyalty in the Pakistan FMCG market.
- ii) To examine the relationship between each dimension of the SERVQUAL model and customer loyalty in the Pakistan FMCG market.

The following sections of the study provide the definition of service quality, review of literature, the method used in current study followed by outcomes and deductions on the basis of the findings of the present study discussed in the last section.

## 2. Literature Review

This section discussed the literature regarding the service quality, its dimensions, and measurement of the service quality. Thereafter, the relationship between service quality and customer loyalty has been explained. Based on the literature discussed, the hypotheses were established to empirically examine in the context of this study.

### 2.1. Definitions of Service Quality

In order to define and evaluate service quality, it is crucial to comprehend the concept of service, which is defined as, “the intangible offer by one company to another company or individual in exchange of money for the satisfaction of their need” (Kotler & Keller, 2009). The primary focus of all the definitions of service quality is how to better fulfill customers' needs and how to match the service delivered to customers' expectations (Lewis, 1993; Radojevic, Stanisic, & Stanic, 2015). The notion of service quality is also defined as, “a comparison between consumer expectations of service and consumer perceptions of the service level provided” (Anantharanthan Parasuraman, Zeithaml, & Berry, 1985).

In the literature for service quality, expectations are taken as wishes or wants, for example, anything customer expects from the service provider, rather than it would actually offer, and these expectations are formed on the basis of previous understanding of customers about the company and its value propositions, relative to its competitors and also based on word-of-mouth communications (Akbar & Parvez, 2009; Lewis, 1993).

## 2.2. Service Quality

The literature regarding the field of management and marketing considered service quality as “the difference between the expected and actual received services by the customers”, as the best method to measure service quality perception that is helpful for the firm management to recognize and manage the service gaps (Ahmed, 2016). This gap between expected and actual quality has the direct influence on the satisfaction of the customer. The lesser is the gap between the actual and expected service, the greater is the customer satisfaction (Balaji, 2009). The phenomenon of “customer needs, culture, past experiences and the other’s word of mouth” provide the basis for developing the customers’ expectations in their mind. Thus, the satisfaction of the customer is the product of the perceived quality of any service which comes through the match of actual service rendered and the expected service (Gounaris, Tzempelikos, & Chatzipanagiotou, 2007).

In a recent study by Sathiyabama and William (2015), the service quality of retailers was examined in Coimbatore city with a consequent evidence of a strong impact of “responsiveness, attractiveness, assurance and reliable service” on the retailer’s service. Furthermore, a study of service quality in retail outlets by Singh (2016) discovered a significant connection between service quality and satisfaction of the customer. Similarly, this assertion was confirmed by Singh (2013) regarding the strong relationship between service quality and the customer loyalty in retail channels. Similarly, another study of retailer behavior conducted in India by Khare, Parveen, and Rai (2010) using the traditional SERVQUAL scale, revealed a high encouraging correlation between service quality dimensions.

Moreover, Yu, Wu, Chiao, and Tai (2005) found that a high-quality perception by customers can be directly correlated to the customer satisfaction as well as staff retention, by means of enhanced profitability, market share and an overall corporate reputation. After the high satisfaction level, the customers find themselves in good relationship with the organization and consider it to the high extent (Rootman, 2006). Similar findings were extended by Ofori et al. (2016), F. Ali et al. (2016), Akbar and Parvez (2009) and R. Oliver (1993), who also confirms that the service quality being assessed at the transaction level actually precedes the consumer satisfaction, whereas the customer satisfaction that signifies the quality of service, is the predecessor of relating the customer to the company. Hurley and Estelami (1998) argue that observation of service quality determines the customers’ feelings regarding the company and which ultimately settle on their loyalty to and the relationship with the company in the long run.

The advocated advantages of the customer loyalty with company results in their less price sensitivity, greater interest and an enhanced recommendation of their favorite brands (Dowling & Uncles, 1997). The premium quality services bring in the recurrence of sales among the customers along with an enhanced market share to the company

(Tsoukatos & Rand, 2006). Moreover, a similar expression is extended by Lee and Hwan (2005) who asserts that the satisfied customers have more favorable intentions for the company that motivates them for a repurchase behavior with an ultimate direct impact on the profit of the company.

The review of literature above concludes that the quality of service impacts the customer satisfaction and customer loyalty directly. In addition to that, V. A. Z. Parasuraman et al. (1988) had developed the SERVQUAL scale, but, A Parasuraman et al. (2002) had reassessed the same study with three types of service industries considering banking, insurance and telephone repair. In that study, the data were collected from five nationally known companies of USA consisting of one Telephone Company, two Insurance Companies and two Banks. Data randomly were collected from the customers of the above mentioned five companies around 1800 to 1900. This study enhanced the validity of the SERVQUAL scale; unfortunately, this and most of the other studies on SERVQUAL, have been carried out in the context of developed countries. The cultural differences in the developing countries are still a matter of concern. Therefore, the potential need to assess the validation of SERVQUAL scale in the developing economies still remains unfulfilled. To report this gap, the current study goes to re-validate the SERVQUAL model in the FMCG market in Pakistan. For that purpose, the current study considered the customer loyalty as a criterion construct to accurately measure the validation of the SERVQUAL scale.

### **2.3. Service Quality Dimensions**

The well-recognized set of service quality dimensions, as offered by (Anantharanthan Parasuraman et al. (1985); V. A. Z. Parasuraman et al. (1988)) such as “tangibility, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing the customer, and access” appear to be the most widely reported phenomenon. Later, a process factor analysis by A Parasuraman et al. (2002) compacted them into five factors “tangibles, reliability, responsiveness, assurance and empathy”.

Henceforth, in the viewpoint of SERVQUAL, the five of the proposed dimensions of service quality must complement in any services or products offered in the market. These SERVQUAL dimensions facilitate the firms accurately gauge the customer's perception about the firm, the level of satisfaction and loyalty of customers (Ahmed, 2016; V. A. Z. Parasuraman et al., 1988). Also, the perception regarding the service quality and its influence on the behavior of customers have been a serious agenda distressing the organizational performance and the sustainability of the organization (Carrillat, Jaramillo, & Mulki, 2007; Y. Kim, Kim, & Lee, 2011). Considering this fact, the present study focusing on the perception of Fast Moving Consumers Goods customer on service quality dimensions through psychometric properties of SERVQUAL construct in relation to customer loyalty.

Following are the explanation of SERVQUAL dimensions which include:

### **2.3.1. *Tangibles***

Anantharanthan Parasuraman et al. (1985) Defined tangibility as the physical appearance of announced facilities, materials, equipment's, and the service personnel. The physical characteristics of products or services or retail outlets or firm operated outlets attract customers directly while following their shopping activities. Also, the supporting factors including the business environment and the friendly interaction of the staff with the customers also considered by the customers (Raza, Siddiquei, Awan, & Bukhari, 2012). Also, V. A. Z. Parasuraman et al. (1988) stated that the dimension of tangibles covers the physical setting of an organization, the different kind of services provided and the materials or equipment used for communication. Conversely, the physical characteristics and staff presentation often can increase the incongruity between customer's expectation and perception Urban (2010), even though it is significant that the supportive and convenient environment provided to the customers developed the favorable service quality perception (Nguyen, 2012).

### **2.3.2. *Reliability***

Reliability is deemed as the conformance of the firm's all promised services. According to V. A. Z. Parasuraman et al. (1988) reliability is the essential dimension of the overall service quality which deals with the fulfillment of the undertaken promises by the firm to provide the quality-orientated services in a perfect as well as reliable manner. The conception of reliability in the retail market refers to the accuracy and timeliness of the sales and service staff while dealing with the customer's complaints and promises made with the customers (He & Li, 2011). Consequently, it can greatly affect the perception of the customers regarding the service quality. Past studies recommended the reliability as one of the significant feature which form the perception of the customers on service quality (Dabholkar, 1996).

### **2.3.3. *Responsiveness***

The term responsiveness refers to the promptness of the firm to accommodate their customers quickly. According to Anantharanthan Parasuraman et al. (1985) responsiveness is defined as the enthusiasm of the firm staff to provide the timely and quality services. Also, responsiveness involves understanding of the customers' needs and wants, attention given by staff to individual customer, suitable dealing hours, and responsible attitude of staff towards customer's problems and financial transactions (M. Kumar, Tat Kee, & Taap Manshor, 2009). As a consequence, the way staff deals with the customers, directly affects the perception of the customers regarding service quality. Urban (2010) indicated that the enthusiasm and willingness of the service staff in dealing the customers is align with the responsiveness and helpfulness attitude of the firm as highlighted by the (V. A. Z. Parasuraman et al., 1988). Therefore, the responsiveness attitude of the staff wins the customers confidence which in turn directly enhance the perception of the customers towards firm's service quality (Haque, Sarwar, Yasmin, & Anwar, 2012).

### **2.3.4. Assurance**

The notion of the assurance refers to the trustworthiness, understanding and courteousness of the employees. According to Anantharanthan Parasuraman et al. (1985) defined assurance as the courtesy and knowledge of the staff and their ability to develop trust and confidence among their customers. Also, the perception of the service quality is mainly depend on the staff ability in imparting the confidence among their customers. Furthermore, it is associated with the staff appropriateness in understanding the customer's desires and the considerable knowledge they must have to answer the customer's questions (S. A. Kumar, Mani, Mahalingam, & Vanjikovan, 2010). To align with the customers' expectations, the staff need to allocate proper time to deal with their customer in order to increase his/her confidence (Haque et al., 2012). Conversely, in case of failure, in doing so may lead to a negative impression on customer confidence (Liu, Guo, & Hsieh, 2010).

### **2.3.5. Empathy**

The notion of the empathy refers to the capability of the firm to provide individual attention to their customers. According to the Anantharanthan Parasuraman et al. (1985) defined empathy as the kindness and attention given by the firm to its customers. Empathy involves the staff capability in understanding the customer's needs, giving them individual attention and facilitate with the suitable business hours.

## **2.4. Service Quality Measurement**

Since, the formulation of SERVQUAL by V. A. Z. Parasuraman et al. (1988) accompanied by its latest refinements in (1991), had been tested in a diverse service industry in various countries. Its psychometric dependability has been questioned by a number of authors due to its reliance on a dual scale (measuring perceptions and expectations) rather than a single, simple, shorter and more effective scale (that of perception only). However, it persists to be one of the most extensively acknowledged tools for evaluating service quality.

## **2.5. Relationship between Service Quality and Customer Loyalty**

In the pertinent literature, the notion of service quality has been considered as the antecedent of customer loyalty (Wieringa & Verhoef, 2007). Past studies have attempted to explain the relationship between customer loyalty and its determinants, hence found the service quality as the strong determining factor which leads to competitive advantage and organizational success (Guo, Xiao, & Tang, 2009). The provision of good service quality works as the kind action of the service provider (firms), which in turn reciprocates the loyalty of the customer and vice versa (Falk & Fischbacher, 2006; Lai, Griffin, & Babin, 2009). Among the prominent scholars, service quality has been regarded as a strong predictor of customer loyalty (Ganguli & Roy, 2011).

Furthermore, previous studies have described that customer loyalty has been created through two ways, impressing the customers R. L. Oliver (1999) and providing them greater quality products or services (H. H. Chang, Wang, & Yang, 2009). It is also strongly recommended by the scholars that the service quality should be enhanced in order to influence the loyalty among customers (Al-Refai, 2015). In contrast, poor delivery of service quality adversely affects the service provider and customer relationship and loses in the shape of compensation to the customers (Wang, 2010).

Besides, numerous previous studies have investigated the service quality and customer loyalty relationship in different settings (Al-Refai, 2015). For instance, Ishaq (2012) has examined the relationship between service quality and customer loyalty among the Pakistan mobile phone users. The study found the significant positive service quality and customer loyalty relationship. Y.-E. Kim and Lee (2010) recommended the service quality as a strong predictor of customer loyalty. In addition to that, the relationship between each dimension of service quality and customer loyalty has been rarely examined. Al-Rousan and Mohamed (2010) examined the relationship between each dimension of the service quality and customer loyalty. The study was conducted in the context of Jordanian hotels. Their study revealed the significant positive results regarding each dimension and customer loyalty. Similarly, the study of M. Ali and Raza (2017) also examined the effect of each dimension of service quality on the customer satisfaction from the perspective of Islamic banks customers in Pakistan. The study also found the significant positive outcomes explaining the existence of a relationship of each dimension with the customer satisfaction. Hence, it is recommended to study further the impression of each dimension of service quality in order to validate the SERVQUAL model in the Pakistan context.

## **2.6. Hypotheses Development**

The above review of the literature encourages the researchers to study further the service quality and its relationship with the customer loyalty and the relationship of each dimension of service quality with the customer loyalty from the FMCG customers' perspective, especially in the Pakistan market. Based on the past empirical findings, the following hypotheses have been formulated:

**H1:** *There will be a positive relationship between service quality and customer loyalty.*

**H2:** *There will be a positive relationship between tangibility dimension of service quality and customer loyalty.*

**H3:** *There will be a positive relationship between reliability dimension of service quality and customer loyalty.*

**H4:** *There will be a positive relationship between responsiveness dimension of service quality and customer loyalty.*

**H5:** There will be a positive relationship between assurance dimension of service quality and customer loyalty.

**H6:** There will be a positive relationship between empathy dimension of service quality and customer loyalty.

### 3. Methodology

#### 3.1. Sample Selection and Sampling Technique

Desired data were collected from the customers of FMCG firms operating in Southern Punjab. For this study, the stratified sampling technique was used to determine the sample. The sample was taken into two strata on the basis of homogeneous characteristics of FMCG firms that are National and Multinational FMCG firms. The present study adopted 21-items of SERVQUAL scale and for conducting validation, the Bentler and Chou (1987) assumption of 15 participants for each parameter being assessed (Schreiber, Nora, Stage, Barlow, & King, 2006). To make more authentic validation of the scale, the sample size was doubled. Therefore, the sample size of 600 was taken into account for the present study and the questionnaires were sent to the customers of selected FMCG firms, out of which 476 questionnaires were collected and only 400 were usable, representing the response rate of 66.67%.

#### 3.2. Instrument

A 21-items scale of SERVQUAL recommended by A Parasuraman et al. (2002) was adapted in this study with its five dimensions, namely “Tangibility, Responsiveness, Reliability, Assurance, and Empathy” with their respective 4-items, 4-items, 5-items, 3-items and 5-items of each dimension. And to measure the customer loyalty an 8-items scale recommended by Chaudhuri and Holbrook (2001) was adapted in the current study. A 5-point Likert scale was used to facilitate respondents to react conveniently, where 1 has been coded as “Strongly Disagree” and the 5 as “Strongly Agree”.

#### 3.3. Demographic Profile

Out of 400 usable respondents, 63.8% appear to be male and 36.2% were females. Concerning the age group of respondents, the highest group (64%) was composed of 21 to 30 years of age and the age group of 60 or above represented the lowest group (0.2%). With respect to the marital status, 37% customers are married and 63% are single. Moreover, in terms of qualification, the respondents with Masters’ qualification, turn out to represent majority that is (52.5%) while the ones with a bachelor’s degree were (35.5%). Respondents with the doctoral qualification were only 1.2% that is 5 out of 400 and 43 (10.8%) have the qualification of MPhil. More importantly, with respect to the given strata, 30% customers are using products of National FMCG firms and 70% are using products of Multinational FMCG firms.

### 4. Analysis and Results

To assess the effectiveness of SERVQUAL scale in the FMCG industry of Pakistan, the present study adopted the use of PLS path modelling to analyze the data by using

Smart-PLS 3.0 (Ringle, Wende, & Becker, 2015). This structural equation modelling technique is gaining popularity around the globe due to its user friendly approach and other powerful mechanics. Beside its numerous other powerful functions, this approach is highly recommended as a useful tool when the objective of the study is to test and validate the models (Hair, Sarstedt, Ringle, & Mena, 2012; Henseler, Ringle, & Sinkovics, 2009). Referring on the suggestions put forward by Wold (1975), the present study adopted Smart-PLS 3.0 for the data analysis. Looking into the nature of the analysis and purpose of the present study, the validation of the SERVQUAL scale and customer loyalty scale has been assessed using measurement model approach and thereafter the hypotheses were assessed using the structural model. In doing so, PLS Algorithm was calculated to ascertain the individual item-reliability, internal-consistency reliability, convergent validity and discriminant validity of the measures (Geladi & Kowalski, 1986; Henseler et al., 2009). Consequently, bootstrapping was examined and then results are subsequently presented and discussed in the following sub-sections.

#### 4.1. Measurement Model Evaluation

Looking at the nature of the study, it is significant to determine the reliability of each item in the SERVQUAL scale and customer loyalty scale. The present study assessed the individual item reliability by observing the outer loadings (Duarte & Raposo, 2010; J. F. Hair Jr, Hult, Ringle, & Sarstedt, 2016). Researchers have mutually agreed over 0.40 and 0.70 as a rule of thumb to determine individual item reliability (J. F. Hair Jr et al., 2016). Following Table 1 shows the outer loadings of the SERVQUAL scale adopted in the present study.

**Table 1:** Measurement Model

Construct	Item	Outer Loadings	Composite Reliability (CR)	Average Variance Extracted (AVE)
Assurance	ASSR1	0.773	0.786	0.647
	ASSR2	0.835		
Empathy	EMP2	0.783	0.796	0.565
	EMP3	0.742		
	EMP4	0.729		
Reliability	REL2	0.746	0.802	0.575
	REL3	0.733		
	REL4	0.795		
Responsiveness	RESP2	0.718	0.769	0.526
	RESP3	0.756		
	RESP4	0.700		
Tangibility	TAN1	0.706	0.773	0.532
	TAN2	0.760		
	TAN4	0.721		
Customer Loyalty	CL4	0.639	0.803	0.506
	CL5	0.674		
	CL7	0.782		

CL8	0.741
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**Note:** ASSR3, EMP1, EMP5, REL1, REL5, RESP1, TAN3, CL1, CL2, CL3, CL6 were deleted due to lower loadings.

The outer loadings for the 15-items of the SERVQUAL scale were found greater than the standard cutoff value of 0.4 (J. F. Hair Jr et al., 2016). Finally, from SERVQUAL scale, 14-items were retained for a total of 21-items; 7-items in this construct were deleted due to lower loadings. From customer loyalty construct, out of total 8-items, 4-items were deleted and rest 4-items with greater loadings were retained. The overall retained outer loadings ranged from 0.639 to 0.835. This ensured that all the taken items have sufficiently met the criteria of individual item reliability.

The internal-consistency reliability denotes “the degree to which every item on an individual scale (or sub scale) measures the same concept” (Bijttebier et al., 2000). Cronbach’s alpha coefficient and composite reliability appeared to be the widely-used methods to estimate internal-consistency reliability in the past (*refers (McCrae, Kurtz, Yamagata, & Terracciano, 2011; Peterson & Kim, 2013)*). Present study employed composite reliability coefficient for determining internal-consistency reliability of the SERVQUAL scale and customer loyalty scale (Bagozzi & Yi, 1988; Hair, Ringle, & Sarstedt, 2011). According to the Hair et al. (2011), a construct meets composite reliability criterion when it scores 0.7 or more. The composite reliability coefficients provided in Table 1, shows that all the constructs of the present study have ranged from 0.769 to 0.803. These coefficient scores suggest that the scale of the present study has demonstrated adequate amount of internal-consistency reliability (Hair et al., 2011).

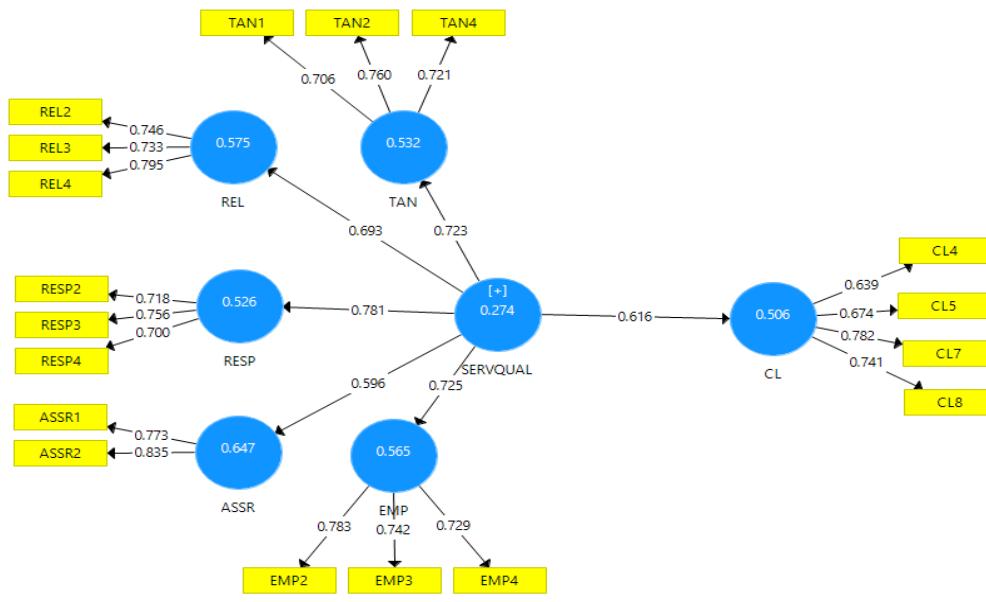
The convergent validity demonstrates “the degree to which items truly represent the intended latent constructs and correlate with other measures of the same latent construct” (J. Hair Jr, Black, Babin, Anderson, & Tatham, 2006). The convergent validity was ascertained on the basis of Average Variance Extracted (AVE) of the latent constructs. This was followed on the guidelines of Chin (1998), according to whom, the AVE loadings should be 0.5 or above for each of the latent construct. Table 1 outlines that the average variance extracted for the SERVQUAL scale and customer loyalty is equal or greater than 0.5 respectively. This further suggests that the current study has successfully demonstrated the convergent validity.

Last, the current study attempted to assess discriminant validity of all the latent variables. The discriminant validity denotes the degree to which a given latent variable is different from other latent variables (Duarte & Raposo, 2010). The discriminant validity is assessed upon the guidelines of Fornell and Larcker (1981), according to whom, the square root of the average variance extracted should be above than the correlations among latent variables. The square-root of AVE (in the boldface values) and correlations among latent constructs are provided in Table 2.

**Table 2:** Construct's Discriminant Validity

	ASSR	CL	EMP	REL	RESP	TAN
<b>ASSR</b>	<b>0.804</b>					
<b>CL</b>	0.374	<b>0.711</b>				
<b>EMP</b>	0.293	0.507	<b>0.752</b>			
<b>REL</b>	0.342	0.368	0.330	<b>0.758</b>		
<b>RESP</b>	0.357	0.473	0.464	0.430	<b>0.725</b>	
<b>TAN</b>	0.333	0.457	0.417	0.341	0.450	<b>0.729</b>

The boldface values provided in table 2 are the square root of the average variance extracted. The AVE values suggest that all the latent constructs have successfully demonstrated a sufficient level of discriminant validity; as all the values of the square root of AVE were greater than the correlations. It is, therefore, concluded that all the measures of the SERVQUAL scale and customer loyalty scale have met the discriminant validity requirements. Figure 1 shows the measurement model of the study.



**Figure 1:** Measurement Model

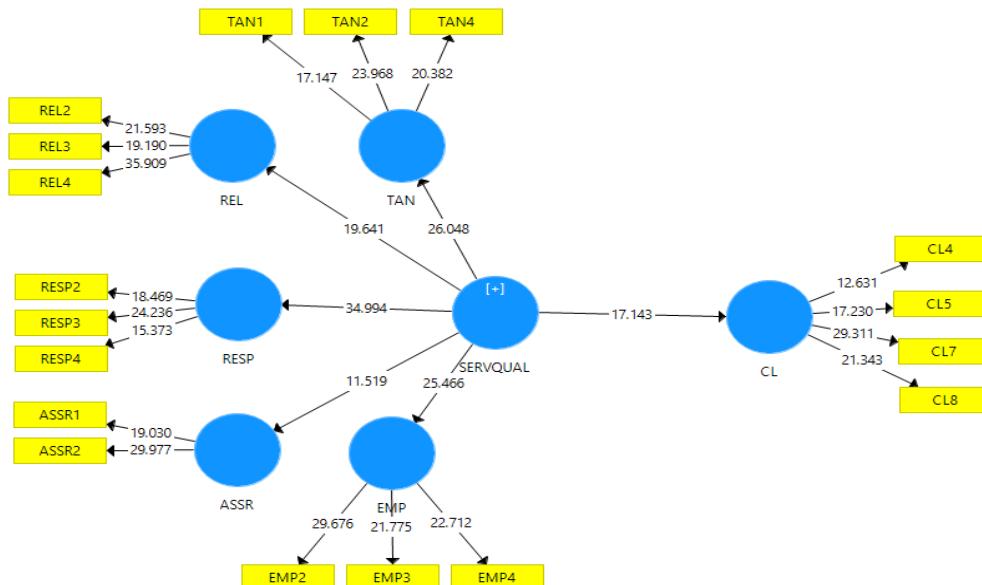
#### 4.2. Structural Model Evaluation

After the measure model evaluation, structural model was assessed to test the six hypotheses formulated in this study. Table 3 provides the findings of the path analysis. The findings revealed that all the tested hypotheses where SERVQUAL ( $\beta=0.616$ ,  $t=17.143$ ,  $p<0.00$ ), TAN ( $\beta=0.185$ ,  $t=3.586$ ,  $p<0.00$ ), REL ( $\beta=0.098$ ,  $t=2.145$ ,  $p<0.00$ ), RESP ( $\beta=0.168$ ,  $t=3.184$ ,  $p<0.00$ ), ASSR ( $\beta=0.135$ ,  $t=2.898$ ,  $p<0.00$ ), and EMP

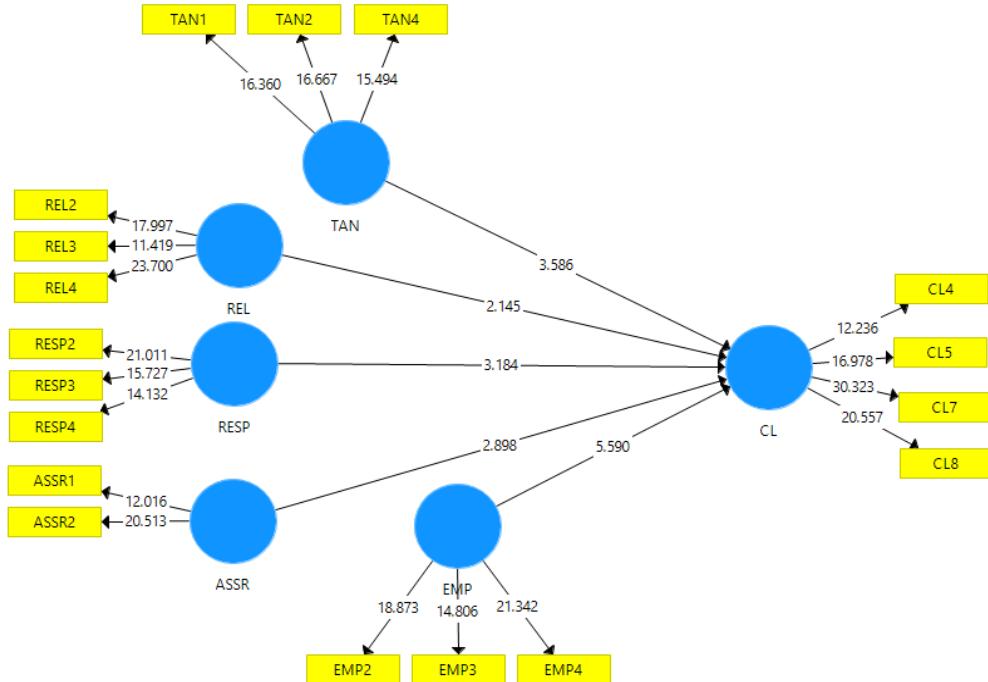
( $\beta=0.284$ ,  $t=5.590$ ,  $p<0.00$ ) significantly related to the customer loyalty and all the variables explaining the 37.9% variance in the customer loyalty. Hence, hypothesis H1, H2, H3, H4, H5, and H6 were accepted and shown in figure 2 and figure 3.

**Table 3:** Hypotheses Testing

Hypotheses	Relationships	Beta	SE	T-Value	P-Value	Decision
H1	SERVQUAL > CL	0.616	0.036	17.143	0.000	Supported
H2	TAN -> CL	0.185	0.052	3.586	0.000	Supported
H3	REL -> CL	0.098	0.046	2.145	0.016	Supported
H4	RESP -> CL	0.168	0.053	3.184	0.001	Supported
H5	ASSR -> CL	0.135	0.047	2.898	0.002	Supported
H6	EMP -> CL	0.284	0.051	5.590	0.000	Supported



**Figure 2:** Structural Model SERVQUAL to CL



**Figure 3:** Structural Model SERVQUAL Dimensions to CL

As per the recommendation of J. F. Hair Jr et al. (2016), predictive relevance ( $Q^2$ ) was also calculated through blindfolding procedure using a distance interval of 7 in SmartPLS 3.0. The purpose to calculate the  $Q^2$  value is to estimate the model parameters and to predict the omitted part using these parameters (Hair et al., 2013). As the  $Q^2$  value of this model is 0.180 with only single endogenous variable that is customer loyalty and greater than 0, hence depicts that the model is accepted and having satisfactory predictive power (Fornell & Larcker, 1981).

## 5. Discussion

The current study makes an effort to empirically validate the Service Quality (SERVQUAL) scale developed by A Parasuraman et al. (2002) in relation to the customer loyalty in the Pakistan FMCG market context, especially looking into the customers of Multinational and National FMCGs firms operating in South Punjab, Pakistan. The construct of SERVQUAL has met the criteria and recommend that this tool is appropriate in measuring service quality in the FMCG market of Pakistan. Additionally, the SERVQUAL scale was developed and tested in the developed country context. Therefore, it is important to look into the question that how do SERVQUAL scale scores in the developing countries especially with regards to Pakistan. The outcomes of the measurement model and structural model regarding the reliability and validity tests inform that the SERVQUAL is appropriate in measuring any or all of the

service quality parameters consisting of tangibility, reliability, responsiveness, assurance and empathy.

Also, the current study initially measured the direct effect of service quality on customer loyalty and found significant and positive results. Thereafter, the relationship between each dimension of service quality and customer loyalty were examined and found the significant positive results. These findings of the current study highlighted that the perception of the customers regarding overall service quality influences their loyalty with the organization and its products. Likewise, Pakistani consumers also become loyal with the provision of tangibility, reliability, responsiveness, assurance, and empathy. Moreover, the sales and service staff of the FMCG firms played very vital role in the development of the good perception of service quality which increases the positive word of mouth and ultimately influences the customer loyalty.

In general, the findings of the current study are consistent with the past studies that focus on the customers perceived service quality and its impact on their customer's loyalty. For instance, the study of Al-Refai (2015) also examined the relationship between service quality and customer loyalty among the mobile phone users. The study analyzed the overall impact of service quality on the customer loyalty and revealed the significant relationship between service quality and customer loyalty. Similarly, the study of Ishaq (2012) investigated the relationship between service quality and customer loyalty among the Pakistan customers. By using the SERVQUAL model, his study also revealed the significant relationship between service quality and customer loyalty. In gist, there are also other studies which found the positive relationship between service quality and customer loyalty in different work settings (Bedi, 2010; Naeem, Akram, & Saif, 2009). On the contrary, there are few studies on the SERVQUAL model conducted in developing countries like Iran and Bangladesh revealed negative results which showed the unsatisfactory perception of the customers regarding the service quality (Enayati, Modanloo, Behnamfar, & Rezaei, 2013; Zabed Ahmed & Hossain Shoeb, 2009). Furthermore, the findings suggest that the developing countries customers reveal repurchase intention and his/her loyalty with the firm product or service when they are satisfied with the service quality from all aspects. Hence, the findings of this study add value to the existing literature regarding the positive relationship between service quality and customer loyalty in the developing country i.e. Pakistan context.

Furthermore, in this study, the significant and positive results regarding the relationship between each dimension of the service quality and customer loyalty are also consistent with the findings of the past studies those examined the impact of each dimension of service quality on the customer loyalty (Al-Rousan & Mohamed, 2010; M. Ali & Raza, 2017). Accordingly, the current study findings confirm that each dimension of the service quality also contributes towards the development of the service quality. The customers are attracted by each aspect of the service quality. Therefore, the firms should

focus on each aspect of the service quality in the delivery of the quality services to the customers, especially the Pakistan national FMCG firms should upgrade their quality standards and focus on the delivery of quality services to the customers in order to attain the competitive advantage and compete with the multinational FMCG firms.

## 6. Conclusion, Managerial Implications and Limitations

The current study measures the SERVQUAL dimensions in the Pakistan context specifically on the perception of the customers of the FMCG firms. The study concluded that the better service quality is provided to the customers and firms focus on all aspects of the service quality lead towards the customer loyalty. Consequently, due to the less focus on the service quality, there is an increased in the dissatisfaction level of the customers and spread negative word of mouth which leads to customer changing attitude. Moreover, it will damage the image of the firm. In short, the validation of the SERVQUAL construct also contribute to the existing literature on the service quality construct especially in the developing countries context like Pakistan.

The study also develops the significant base for the other researchers and academicians of the developing countries to explore more deeply the SERVQUAL dimensionality. Also, the findings of the current study are very useful for the managers' sales and services, policy makers, marketing firm and for R & D oriented firms. The study guides the concern authorities in setting their objectives, strategic planning and more importantly with respect to cost minimization and profit maximization. The managers must focus on those service quality dimensions that directly impact psychologically on the perception level of the customers and increase their satisfaction level which in turn become their loyalty. Furthermore, it is necessary for the Fast Moving Consumer Goods Producing firms to collect information about the attitude and behavior of their customers in order to retain them and attract the new customers. Pakistan Fast Moving Consumer Goods market have now big competition because the both Multinationals and National firms focusing on the quality of the services and products which shows the huge importance of the service quality dimensionality and practicability in the Pakistan context. This is the reason, now a day's firms focus on the improvement of the service quality which influences their customers' satisfaction as well as loyalty (Kotler & Keller, 2009). In this way, the current study adds more value in the literature through assessing the SERVQUAL dimensions in relation to customer loyalty.

Although due to the limitations related to time and cost, the sample for the present study was limited to the one province of the country. Therefore, it could be potentially tested with a larger sample in the same industry or an analysis is recommended using the multiple industry samples. Yet, it is highly advised to the future researchers and business consultants to evaluate service quality using the SERVQUAL scale in the Pakistan Retail market or FMCG sector. Furthermore, it is recommended to adopt qualitative approach by the researchers in order to determine the experiences of the frequent customers through interviews which will contribute more deeply into the

understanding of the service quality and its dimensions. This is the basic exploratory study which assesses the validation of the SERVQUAL construct and based on the findings of this study the scale can also be used in the different context in Pakistan. To get the stronger perception on the service quality, it is recommended to study on the perception of the internal customers and make comparison with the external customer's perception on service quality. Also, due to the limitation of the current study, the internal customers who delivers the service quality to the external customers are not considered. Considering this limitation, it is recommended to study the relationship of the SERVQAUL construct with the employees and could analyzed their perception regarding the dimensions of the service quality which they delivered to the external customers.

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