

**An Empirical Investigation into the relationship between  
Organizational Culture, Internal Service Quality (ISQ) and  
Organizational Performance**

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**Abstract**

*The purpose of this paper is to examine the mediating role of internal service quality on the relationship between organizational culture and organizational performance. The study utilizes the collaborative culture dimension. Data for the study were collected through a survey from 80 bank branches of 11 large and medium sized banks in Peshawar, Pakistan and responses were analyzed to assess the relationships between collaborative culture, internal service quality, and organizational performance. A total of 564 questionnaires were distributed, 404 questionnaires were returned, constituting the response rate of 71.63%. A total of 63 questionnaires were rejected. The total number of questionnaires usable for the study was 341. The findings revealed that in the banking sector, collaborative culture and internal service quality have a direct and positive impact on the organizational performance, furthermore the results revealed that ISQ partially mediates the relationship between collaborative culture and organizational performance. The findings provide useful insights for organizations, particularly in the banking industry, seeking to be competitive and responsive to the increasing challenges. Conclusions emphasize that mechanisms to encourage and foster ISQ in the organization are likely to facilitate the introduction, adoption, and diffusion of service quality both within and outside the organization which in turn, is likely to result in achievement of superior bank performance.*

**Keywords:** Collaborative Culture, Internal Service Quality, Organizational Performance

Businesses endeavor for improvement in performance and organizational culture has been recognized as one of the important drivers of better organizational performance. A poor organizational culture and climate will significantly deteriorate service quality and customer satisfaction and hence the organizational performance (Oh & Pizam, 2008). Corporate culture has received much consideration in the recent years due to its potential impact on organizational performance (Rashid, Sambasivan, & Johari, 2003). The prerogative that culture is related to organizational performance is instituted on the perceived role that culture can play in engendering competitive advantage (Ogbonna & Harris, 2000). Similarly Internal Service Quality (ISQ) has also been found to have a significant impact on organizational performance (Bellou and Andronikidis, 2008). ISQ has its imprints on the business success that comes from service performance, while service performance comes from

the quality of service (Zailani, Din, & Wahid, 2006). This quality of service is not only the external service quality but also the ISQ, since the quality of external service is dictated by the quality of internal service (Cook, 2004). Business has laid much of their focus on the external service quality. Hays (1996) highlighted the ground for this management behavior and further observed that the excitement and passion surrounding the drive and excellence to serve external customers often outdo the internal activities and processes. The management must understand that if staff in one department fails to provide timely service to their co-workers in another department, this will surely result in delayed service to external customers, thus resulting in negative credibility and loss of reputation. This slowness in focus towards ISQ is changing. Business organizations are realizing the fact that an adequate level of service received within the organization would translate into satisfactory external service quality. The quality of external service is hugely reliant on the quality of internal service. Existing research studies have highlighted the significance of culture in multiple outcomes related to service quality, for instance customer service orientation (Gronroos, 1990), self-reported service behavior (Zerbe, Dobni & Harel, 1998), service effectiveness (Agbenyiga, 2011), and internalization of quality (Ogbonna, & Harris, 2012). Similarly there are research studies which have ascertained the impact of service quality on organizational performance (Jain and Gupta, 2004; Getty & Getty, 2000). However, there is a significant lack of internal service quality perspective in existing research, most of the existing studies evaluate the perception of external customer, and the research reported here studies internal service quality and collaborative culture as an attempt to understand their impact on organizational performance. Furthermore, to the best of authors' knowledge and with the extensive study of the existing literature it was found that there are no studies which have specifically modelled and empirically researched the nature of relationship between collaborative culture, internal service quality and organizational performance. Therefore an examination of the relationship between the three variables will provide significant managerial insights into how both concepts impact the business performance.

Given the paucity of literature in this area, the aim of the research is to ascertain the relationship between culture and organizational performance and the role of internal service quality in this relationship. The study to comprehend the relationship between culture, internal service quality and organizational performance is undertaken in the context of a developing economy. A number of motivations prompted to study the service quality. Services sector is largest and fastest growing sector in the world economy, accounting largest share in total output and employment in most developed countries. The services sector has provided steady support to Pakistan's economic growth. The shares of services are increasing in all sectors of economy over the

period. In fact, the growth rate of services sector is higher than the growth rate of agriculture and industrial sector. Services sector has strong linkages with other sectors of economy; it provides essential inputs to agriculture sector and manufacturing sector (Ahmed & Ahsan, 2011). The share of the services sector has reached to 58.8 percent in 2014-15 (Pakistan Economic Survey, 2014).

### **Literature Review**

Three main streams of literature have been utilized for building our model and hypotheses. The first stream relates to internal service quality, the second stream relates to collaborative culture and the third stream relates to organizational performance.

### **Concept and Need of Internal Service Quality**

ISQ is defined as the quality of service delivered by different departments or the people working in these departments, to other departments or to workers within the organization (Stauss, 1995). The person delivering the service is referred to as the supplier, while the person receiving the service is the internal customer. Hammer (2001) defined ISQ as “an organized group of related activities that together create a result of value to customers.” (p. 52). It can be asserted that the former definition highlights the system of ISQ while the latter identifies the ultimate objective of ISQ. The concept of ISQ used throughout this article reflects Heskett *et al.*'s (1994) assertion that ISQ is determined by the attitudes employees have toward one another and the way people serve each other inside the organization. In simple terms, ISQ refers to the quality of interaction, support, and level of communication between different individuals working in an organization.

For the purpose of achieving higher external service, an organization can be framed into a chain of individual functional units (Jeng & Kuo, 2012). Thus the ultimate objective of ISQ is to provide quality service to external customers that actually relies on delivering service quality across internal units (Brandon-Jones & Silvestro, 2010). The quality of service, that employees in different departments receive from each other significantly influence how external customer's expectations for service quality are met since ISQ establishes and reinforces a climate and organizational culture directed towards quality (Omachonu & Ross, 2005). A satisfied customer foundation surely guides the business to success if linkage of external service with the employees is clearly established. Not only that ISQ results in external service quality, but also benefit the organization in a variety of other ways, for instance employee retention is based on ISQ (Cook, 2008; Dinitzen & Bohlbro, 2010; Suganthi & Samuel, 2004). Furthermore the focus on ISQ is important for business growth (Little & Marandi, 2003), it's critical in determining the success of an organization in today's competitive environment (Anosike & Eid, 2011; Frost & Kumar, 2001),

it is crucial in the effective implementation of the organizational objectives (Anosike & Eid, 2011).

### **Organizational Culture**

Culture constitutes a central part of how a business conducts its routine operations. Several definitions have been put forth to state the concept of organizational culture. Organizational culture refers to the overall ethos of a business: characteristics that include both psychological and structural elements, which impact the perceptions and behavior of the employees (Fletcher & Jones, 1992). Schein (1992) defined organizational culture as a pattern of basic assumptions invented, discovered or developed by a given group as it learns to cope with its problem of external adaptation and internal integration. In the last few decades researchers and managers have utilized the concept of culture to point to the climate and practices that businesses develop around their handling of employees, or to the espoused values and credo of an organization (Schein, 2010). Drake, Gulman, and Roberts (2005) referred to culture as an image of an organization's philosophy, history, leadership, values, and shared beliefs. Schein (2010) asserted that in this context, managers speak of developing the "right kind of culture," a "culture of quality" or a "culture of customer service". In this case culture points to a certain values that managers try to instill in their organizations. This right culture is further elaborated by Pfister (2009), who asserted that a right culture would promote "effectiveness", an "ethical culture" would contribute towards organizational performance.

Since there is a right culture, this refers to the assumption that there are stronger or weaker cultures and better or worse cultures and that the "right" kind of culture will impact on the effectiveness of the business organization. There is often the implication in the managerial literature that for effective performance there is a need of having a culture, it is imperative that effective organization will only be established if there is a strong culture since employees would have gelled together, understood the objectives of the organization, respect and comprehend each other, leading to quality of product and service produced. Cultural strength points to the valence of the agreement between employees and their organization on the importance of the key cultural values. The strength of the cultural connection is based on the identification and significance the employee has for the organizational values (Booth & Hamer, 2009). Variety of dimensions are available in the literature pertinent to culture, however, it is not possible to study all of the dimensions. For the present study, Collaborative Culture scale is utilized. In the context of the organizational culture, this current study stresses the aspect of creating a collaborative culture. Collaboration in the current study precisely refers to 'mutual sharing norms of behavior' (Yang, 2007). According to Flores (2004, p. 300), collaborative cultures refer "to working relationships which are spontaneous, voluntary,

evolutionary, and development-oriented”. Lopez, Peon, and Ordas (2004) defined collaborative culture as one that values communication, teamwork, empowerment, and respect and leverages the knowledge of employees resulting in organizational learning. An important aspect in all the above mentioned definitions of collaborative culture is the supportive behavior that is extended by workers towards each other, this in fact creates a working environment where people like to work. Hence a collaborative culture inspires complete engagement of team members since employees enjoy support from each other, mutual respect, and care.

### **Organizational Performance**

The ultimate criterion variable of interest for researchers in any area of management is organizational performance (Richard, Devinney, Yip, & Johnson, 2009). Organizational performance is an indicator which measures how well an organization attain their objectives (Hamon, 2003). Organizational performance alludes to financial performance in economic terms such as profits and return on investment (Homburg & Pflesser, 2000). Organizational survival is determined by performance, which is at the core of all the activities that are undertaken by the organization (Abdalkrim, 2013; Bani-Hani, Al-Ahmad, & Alnajjar, 2009; Choudhary, Akhtar, & Zaheer, 2013). Organizations aim to sustain competitive advantage and attain high performance. Performance of an organization is the result of its activities and processes (Robins & Coulter, 2007) and is a reflection of how well the organization exploits its tangible and intangible resources (Wheelen & Hunger, 2010).

Research has described OP as a multi-dimensional concept (Hamdam, Pakdel, & Soheili, 2012; Ouakouak, Ouedraogo, & Mbengue, 2013). There are different aspects on which organizational performance can be evaluated (Choudhary, Akhtar, & Zaheer, 2013). Measures for OP can be divided into two categories: financial or non-financial (Abdalkrim, 2013; Akdemir, Erdem, & Polat, 2010; De Waal, 2012; Nzube and Omolo, 2012). Organizational performance may be measured using objective or subjective (i.e. Perceptual) measures. Hancott (2005) revealed that, a number of objective indicators have been adopted to measure OP, such as net or total asset growth rate, profit growth rate, shareholder return, return on sales, growth in market share, return on net assets, and number of new products, etc. In the present study, the focus is on subjective performance measured using a set of questions that reveal the perception of employees (Tseng, 2010).

### **Development of Model and Hypotheses**

The main aim of the study is to ascertain the mediating role of internal service quality on the relationship between collaborative culture and organizational performance.

## **Linkage of Organizational Culture with Service Quality and Organizational Performance**

Although there is a dearth of empirical research that examines the influence of organizational culture on ISQ in the banking sector, however there have been studies that have shown the influence of organizational culture on service quality in other sectors. In the study of airline service employees Zerbe, Dobni and Harel (1998) revealed that service culture had a direct influence on self-reported service behavior. Similarly Agbenyiga (2011) in their study of child-welfare agency found a significant influence of organizational culture on service effectiveness. Literature has identified the need for strong culture to boost level of service quality within the organization. Gronroos (1990) has identified that a strong culture that fosters customer/service orientation and comprehension of service quality is vital for successful service quality management. Moreover, the need for a strong service oriented culture that inspires employee behavior is necessitated (Zerbe, Dobni & Harel, 1998) since management in the service sector does not have control over their employees' service behavior (Schneider & Bowen, 1995). A strong service-oriented culture can give guidelines for right and proper behavior toward customers culminating the need for establishing undue processes and procedures to monitor employees' service delivery. Similarly Mathew, Ogbonna, and Harris (2012) asserted that organizational culture that exceeds the old-fashioned approaches of compliance to quality standards or quality control can lead to the internalization of quality as well as the values, attitudes, and behaviors that promote it. Beliefs and expectations are part of the organizational culture, and prescribe the way in which things are done in the organization (Glisson & James, 2002). If the employees within an organization value keeping their word and trust the coworkers, this will certainly influence the provision of service with reliability and assurance. Thus, there is a window of opportunity for organizations to focus on fostering a culture that promotes positive service behavior in and out of the organization, and this could very well translate into business profitability. The study of corporate culture is thus important in trying to better comprehend the context of organizations and the people managing the organization (Rashid, Sambasivan, & Johari, 2003). Exploring the relationship between organizational culture and service quality Phapruek (2008) found that team oriented organizational culture has a positive and significant influence on service quality, strengthening the finding of the study, Chiang and Hsieh (2012) who found a positive relationship between the employees' consciousness of a supportive organizational culture and their mutually supportive and cooperative behavior. Similarly Mathew, Ogbonna, and Harris (2012) found in their study of Indian software companies that organizational culture produces outcomes like worker satisfaction, work quality, and productivity. Further, satisfaction, quality, and productivity are proposed

as leading to firm profitability and growth while work quality is presented as a significant contributor towards organizational innovation.

Organizational culture can be described as the bedrock upon which organizational performance is based. Culture is therefore regarded as one of two types of intangible resources that are regularly noted in the scholarly management literature to explain the sustainable firm success is culture (Schein, 1985). Ogbonna & Harris (2000) identify that the reason for this is that certain organizational cultures lead to superior financial performance. They found direct, strong, and positive associations in their analysis of the links between competitive and innovative forms of culture and organizational performance. Corporate culture has received much consideration in the recent years due to its potential impact on organizational performance. Lok and Crawford (2004) noted that organizational culture can exert substantial impact in organizations, particularly in areas such as commitment and performance.

Literature on organizational culture constantly reinforces the notion that organizational culture is necessary for effective functioning and performance of the organizations. Research has shown significant influence of organizational culture on subjective organizational performance, however, there has been some, albeit limited empirical support for the effect of culture on objective organizational performance (Wilderom, van den Berg, & Wiersma, 2012; Xenikou & Simosi, 2006; Uzkurt, Kumar, Kimzan, & Eminoglu, 2013). In their study of 36 American companies between 1961 and 1980, Peters and Waterman (1982) found certain direct links between corporate culture and financial performance, measured in terms of average turnover growth, compounded asset growth, average return on capital, mean ratio of market to book value, average return on sales, and average return on equity. More recent studies have also indicated that organizational culture has its impact on the long term financial performance of the organizations and culture will be playing a deciding role in determining the success or failure of organizations (Ortiz & Arnborg, 2005; Schlechter, 2001).

A general belief confirms that corporate culture has a long term impact on performance (Kotter & Heskett, 1992). Ginevičius and Vaitkūnaite (2006) reported that organizational culture determined by involvement and cooperation positively impacts organizational performance. Kotter (2012) also suggested that organizational culture has the potential to improve employee job satisfaction, the sense of certainty about problem solving, and organizational performance. Booth and Hamer (2009) found significant influence of cultural dimensions (Morale, Job Satisfaction, Tools & support infrastructure and Manageable workload) on financial performance (Sales Intensity) in UK retail business. Following this line of logic, this study attempts to further investigate the role of organizational collaborative culture on firm objective and subjective performance.

The aforementioned literature can be summarized to further clarify the causal link between culture, ISQ and organizational performance. Culture constitutes of psychological and structural elements that affect employee's perceptions and behaviours, most important behaviours in the context of this study are responsiveness, reliability and assurance which determine the level of ISQ. Enhanced level of these identified behaviours would make a stronger organizational culture that would help in improving firm profitability. Rigid culture influences level of cooperation within the organization that has a significant impact on organizational performance. Based on the aforementioned literature, following hypotheses are proposed.

H<sub>1</sub>: There is a significant positive impact of collaborative culture on ISQ

H<sub>2</sub>: There is a significant positive impact of collaborative culture on organizational performance

H<sub>3</sub>: There is a significant positive impact of ISQ on organizational performance

### **Mediating Role of Internal Service Quality**

Based on the aforementioned literature, it is evident that culture does carry an impact on organizational performance; however the direct influence is still not entirely convincing and confirmed. Previous studies have separately investigated the influence of different culture on ISQ, and the influence of ISQ on organizational performance has also been reported in literature. Hence there exists a causal relationship between culture and organizational performance. ISQ as mediating variable can be central in developing an understanding how culture and organizational performance are related. To the best of the researchers' knowledge, no research was found in the literature that evaluated the mediating role of ISQ on the linkage between culture and organizational performance. The banking industry has traditionally focused on how to transform its physical resources to generate financial performance, and therefore, inadvertently ignored the mediating role of service quality (Mukherjee, Nath & Pal, 2003). Thus, in light of the above reasoning, it is proposed that

H<sub>4</sub>: Internal Service Quality mediates the relationship between culture and Organizational Performance

## **Research Methodology**

### **Population and Sample**

The sample frame for the study was drawn from the banks listed in Karachi Stock Exchange (KSE) having over five branches operating in Pakistan and the city of Peshawar in order to have a representative sample. Out of 24 banks listed in KSE a total of 11 banks were part of the study. Stratified random sampling technique was adopted for the study. The banks were divided into two strata, Medium and Large Banks,



since smaller banks had less than or equal to 5 branches in Peshawar they were excluded from the study. Banks with total assets in excess of Rs. 500 billion is categorized as “Large Banks”, banks with total assets in between Rs. 100 billion to Rs. 500 billion is categorized as “Medium Size Banks”.

### **Measurement**

In order to measure organizational collaborative culture, scale developed by López, Peón, & Ordás (2004) was utilized for the study. López, Peón, & Ordás (2004) developed the scale to measure the influence of organizational culture on knowledge management. Originally there were 8 items in the scale, a higher value of the organizational culture referred to a strong culture. López, Peón, & Ordás (2004) removed two items as part of the validation; reliability for the 6 items was from the study of López, Peón, & Ordás (2004) was reported to be .848. ISQ was measured by a scale developed by Kang, James and Alexandris (2002). Five dimensions were identified from ISQ scale, namely Reliability, Assurance, Tangibles, Empathy and Responsiveness. Tangibles dimension was not included in the study. Subjective organizational performance was measured using the scale developed by Tseng (2010).

### **Data Collection**

The research setting for this study was Public and Private Sector Banks in KPK. The research primarily focused on the primary sources of data collected through research questionnaire. The respondents included branch bankers working at different levels within the Banking sector. The data was collected through questionnaires distributed through personal visits made to the banks, emails and posts. A total of 564 questionnaires were distributed in 80 different branches of medium and large sized banks, 404 questionnaires were returned, constituting the response rate of 71.63. A total of 63 questionnaires were rejected.

## **Data Analysis and Results**

### **Profile of the Respondents**

The demographic profile of respondents showed that average age of respondents was 33.58, minimum age of a respondent was 20 years while the oldest bank worker in the study was 59 years old. Majority of the respondents in the study belonged to the age group 30-39 consisting of 144 (42.2%) respondents. Gender distribution of the respondents showed that majority of the respondents were male (n = 289) representing 84.8 % of the sample, while females were (n = 52) constituting 15.2% of the total sample. Years of education was measured in number of years. Average years of education were 16.12. Majority of the respondents had sixteen followed by eighteen years of education. Subjects were also asked to identify their job rank. Majority of the

respondents were middle ranked (206) representing 60.4% of the total sample, followed by junior rank employees, which were 91 (26.4%). A total of 45 (13.2%) senior level employees were part of the study. Banking system in Pakistan is either conventional or Islamic. Data was collected from both Islamic and conventional banks. 266 (78%) of the respondents were from conventional banks while 75 (22%) of the respondents were employed at Islamic banks.

### Factor Analysis

Factor analysis was performed to identify the underlying factors. Before factor analysis it is important to check if the data meets the required assumptions. To check sample adequacy, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used. The data are judged to be factorable if the KMO measure of sampling adequacy is greater than .60 (Huck, 2012). The results for KMO measure of sampling adequacy revealed values for all constructs close to 1, indicating that the sampling condition was satisfied for the analysis.

To evaluate multicollinearity the determinant statistics was examined. Field (2005) suggests that determinant of R-matrix should be greater than .00001. In case the value of determinant is less than the prescribed value, variables that correlate highly shall be eliminated ( $r > .8$ ). Inter-variable correlation and determinant statistic for each construct was examined. Items depicting multicollinearity were deleted from further analysis. Summary of items removed due to multicollinearity is summarized in table 2.

Bartlett's test of sphericity was utilized to examine if the correlation matrix fit's an identity matrix. A significant Bartlett test indicates that correlation matrix is significantly different from an identity matrix. For factor analysis in the present study principal component analysis with varimax rotation is used. The most commonly used approach for factor analysis is principal components analysis (Pallant, 2011; Huck, 2011; Bajpai, 2011). The most popular rotation method used is *varimax* rotation (Huck, 2012). The minimum factor loading criteria was set 0.50 which is considered higher (Leech, Barrett, & Morgan, 2005).

Table 1. *Multicollinearity Analysis*

Construct	No. of Items	Multicollinearity	Item(s) removed	Items remaining
Internal Service Quality	18	ASR1-ASR2	ASR2	14
		ASR3-ASR4	ASR4	
		RES4-RES3	RES3	
		EMP4-EMP5	EMP5	
Organizational Performance	5	OP4-OP5	OP5	4

Table 2. *Assumptions' statistics for factor analysis*

Construct	DCM	KMO	BTS		Variance Extracted
			$\chi^2$	Sig	
Collaborative Culture	.054	.862	983.846	.000*	61.976
Internal Service Quality	.00002	.935	3553.091	.000*	67.551
Organizational Performance	.087	.804	825.139	.000*	75.551

### Component Matrix

Factor analysis results for each construct are described in this section. A total of six items were part of the collaborative culture. All items loaded onto a single factor with all loading over .70. No items were removed, and all items represented the underlying factor organizational collaborative culture. Theoretically internal service quality is made of four dimensions, however in the present study factor analysis extracted two factors, reliability and empathy & responsiveness. First factor had a total of six items. Seven items loaded onto the second factor. One item cross loaded and hence was removed from further analysis. The results of factor analysis of the criterion variable organizational performance reveal a uni-factorial solution.

Table 3. *Factor Analysis Results*

Construct/Variables	Loadings
Collaborative Culture	
CC1	.739
CC2	.805
CC3	.849
CC4	.767
CC5	.835
CC6	.720
Internal Service Quality	
<i>Reliability</i>	
REL1	.728
REL2	.808
REL3	.789
REL4	.797
REL5	.807
ASR1	.733
<i>Empathy &amp; Responsiveness</i>	
EMP1	.708
EMP2	.729
EMP3	.744
EMP4	.749
RES1 <sup>^</sup>	.707
RES2	.703
RES4	.710
<i>Item Removed (Cross Loading)</i>	

In my bank Coworkers are polite and kind.

Organizational Performance

OP1	.827
OP2	.916
OP3	.880
OP4	.851

**Reliability and Validity**

Cronbach Alpha test has been used to test the reliability of the constructs. The reliability of the construct in the present study range between .876 and .938. Results indicate that reliability of all the constructs is well above .8 (Field, 2005) which indicates good reliability is attained. Further to the reliability, validity of the measures is also established. Both convergent and discriminant validity is established. Convergent validity is established when the concepts that should be related to each other are in fact related. The uni-factorial nature of variables and constructs confirms the construct validity of the dimensions under study (Kuei, 1999). Convergent validity is established if an AVE of .50 or greater is achieved for the constructs. Organizational Performance construct is uni dimensional hence convergent validity is established. Furthermore AVE is calculated, the results revealed that convergent validity for all constructs is established since the statistics for AVE for all the factors is greater than .50.

Table 4. *Reliability analysis of the constructs*

Constructs	Cronbach's Alpha	AVE
Collaborative Culture	.876	.61
Internal Service Quality	.938	
Reliability	.913	.60
Empathy & Responsiveness	.907	.52
Organizational Performance	.890	.75

Discriminant validity determines the extent to which sufficiently distinct constructs are not strongly correlated with each other. Discriminant validity is established if square root of AVE for each construct is greater than inter-correlations of other constructs. Table 5 compares AVE square roots and inter-construct correlations.

Table 5. *Square root of AVE and Inter-Construct Correlations*

	CC	REL	OP	EMPRES
CC	(.78)			
REL	.549**	(.77)		
OP	.552**	.607**	(.86)	
EMPRES	.614**	.720**	.618**	(.72)

**Evaluations of Measurement Models**

The present study involves a total of eight different constructs. This section tests subjects each of the construct to confirmatory factor analysis (CFA) to test if the data fits the measurement and structural model.

***Collaborative Culture***

Collaborative culture comprised of a total of six items. The items were further subjected to CFA, the results are divided into two parts, and initial model is compared with the final model. The results of both initial and final model are shown in the following table. The results indicate a perfect fit obtained for the construct organizational collaborative culture. In initial CFA, CC1 and CC6 did not load well and thus was deleted. Modification indices were analyzed and covariances were drawn between the error terms, the final model had a total of four items. Except for RMSEA and CMIN, three indices SRMR, CFI and TLI showed good fit, hence the model showed mediocre fit and is used in the further analysis.

Table 6. *Summary of initial and attained findings: Organizational Collaborative Culture*

Items	Initial		Final		
	Loadings		Standardized Loadings	C.R. (t)	
CC1	.669		---	---	
CC2	.764		.79	---	
CC3	.832		.84	14.47	
CC4	.722		.79	12.65	
CC5	.790		.75	13.33	
CC6	.641		--		
Attained Fit Indices					
	CMIN/DF ( $\chi^2/df$ )	SRMR	CFI	TLI	RMSEA
Initial	8.037(72.332/9)	.459	.935	.892	.144
Final	6.78 (6.78/1)	.020	.99	.95	.13
Composite Reliability: .87					

Item 1 (CC1) related to change and its appreciation as an imperative, López, Peón, and Ordás (2004) also found low loading for this item. Literature shows that bank employees do show their concern with respect to change (Awasthy, Vijayalakshmi, & Gupta, 2012), this could be attributed to the low loadings. Item 6 (CC6) was removed due to low loading. The composite construct reliability for the four items is .83, the reliability is above the acceptable level indicating that the retained four items are considered reliable as well as valid for the construct measure.

**Internal Service Quality**

Exploratory factor analysis revealed two factors for ISQ namely reliability and Empathy and Responsiveness. Only one item (EMP2) from Empathy & Responsiveness was removed since it failed to load substantially. On deletion of EMP2, the resultant model manifested significant enrichment to the overall fit of the model as shown in the attained fit indices. Finally the composite reliability score for reliability is .91 and empathy & responsiveness was found to be .91 which is deemed to be reliable for the measurement of reliability and empathy & responsiveness. Final ISQ construct had a total of 12 items. The loadings and indices for initial and final attained model are shown in table.

Table 7. Summary of initial and attained findings: Internal Service Quality

	Initial Loading	Final Standardized Loadings	C.R. (t)		
<i>Reliability</i>					
REL1	.725	.707	---		
REL2	.760	.748	13.35		
REL3	.819	.809	14.42		
REL4	.856	.877	15.44		
REL5	.864	.867	15.43		
ASR1	.773	.805	14.16		
<i>Empathy &amp; Responsiveness</i>					
EMP1	.796	.799	---		
EMP2	.499	---	---		
EMP3	.818	.777	15.86		
EMP4	.829	.793	16.30		
RES1	.755	.764	15.54		
RES2	.862	.872	18.58		
RES4	.846	.864	18.36		
Attained Fit Indices					
	CMIN/DF ( $\chi^2$ /df)	SRMR	CFI	TLI	RMSEA
Initial	4.09(262.144/64)	.04	.93	.92	.09
Final	2.56(131.025/51)	.03	.97	.96	.06
Composite Reliability: For Reliability: .91 For Empathy and Responsiveness: .91					

**Organizational Performance**

Originally organizational performance construct had a total of five items. One item was removed due to multicollinearity. The four items left were subjected to CFA. The results showed all items load substantially well onto the construct. The fit indices indicate an adequate fit for the construct. The composite reliability for this measure was .88. The initial and final loadings are compared in table 8.

**Table 8. Summary of findings: Organizational Performance**

	Initial Loading	Final Standardized Loadings	C.R. (t)		
OP1	.77	.77	---		
OP2	.91	.96	17.53		
OP3	.82	.77	15.88		
OP4	.78	.73	15.07		
<b>Attained Fit Indices</b>					
	CMIN/DF ( $\chi^2/df$ )	SRMR	CFI	TLI	RMSEA
Initial	15.38(30.769/2)	.03	.96	.89	.20
Final	3.10(3.10/1)	.00	.99	.98	.07
Composite Reliability: .88					

***Structural Model: Collaborative Culture (CC) and ISQ***

The Structural model evaluates the relationship between RS and ISQ. The modification indices and standardized residual covariances were analyzed. Covariances were drawn between items of the similar latent construct. The final attained model showed acceptable fit indices. The results reveal that collaborative culture had a significant positive impact on internal service quality. The hypothesis is evaluated based on the standardized coefficient, its critical ratio, significance level. The estimation of hypotheses demonstrated that the hypothesized link between CC and ISQ was significant. Hence, H<sub>1</sub> was substantiated.

**Table 9. Summary of findings: Structural Model for CC and ISQ**

CMIN/DF ( $\chi^2/df$ )	SRM R	CF I	TL I	RMSE A	Path	Standardiz ed loading	C.R	P
2.436(241.2/99)	.04	.96	.96	.06	CC→IS Q	.669	8.32	.00
							9	0

***Structural Model: Collaborative Culture (CC) and organizational performance***

The Structural model evaluates the relationship between RS and OP. The initial model revealed acceptable fit indices for SRMR, CFI and TLI, however RMSEA showed mediocre fit. The modification indices and standardized residual covariances were analyzed. Covariances were drawn between items of the similar latent construct. The final attained model showed acceptable fit indices. The results revealed that collaborative culture had a significant positive influence on organizational performance. The hypothesis is evaluated based on the standardized coefficient, its critical ratio, significance level. The estimation of hypotheses demonstrated that the hypothesized link between CC and organizational performance was significant. Hence, H<sub>2</sub> was substantiated.

**Table 10. Summary of findings: Structural Model for CC and OP**

CMIN/DF ( $\chi^2$ /df)	SRM R	CF I	TL I	RMSE A	Path	Standardiz ed loading	C.R	P
2.350(35.2/ 15)	.03	.99	.98	.06	CC→ OP	.550	7.88 5	.00 0

**Structural Model: ISQ and OP**

The Structural model evaluates the relationship between ISQ and organizational performance. The initial model revealed acceptable fit indices for SRMR, CFI and TLI, except for RMSEA showing mediocre fit. The modification indices and standardized residual covariances were analyzed. One Item (RES1) was removed. Covariances were drawn between items of the similar latent construct. The final attained model showed acceptable fit indices. Table 12 shows the comparison between initial and final model. The table shows if the mediating variable (ISQ) had a significant influence on organizational performance. The hypothesis is evaluated based on the standardized coefficient, its critical ratio, significance level. The estimation of hypotheses demonstrated that the hypothesized link between ISQ and OP was significant. Hence, H<sub>3</sub> was substantiated.

**Table 11. Summary of findings: Structural Model for ISQ and OP**

CMIN/DF ( $\chi^2$ /df)	SRM R	CF I	TL I	RMS EA	Path	Standardi zed loading	C.R	P
2.485(208.70 /84)	.03	.96 7	.96 0	.06	ISQ→ OP	.711	10.2 76	.00 0

**ISQ, Collaborative Culture and Organizational Performance**

Mediation analysis was performed using Baron and Kenny (1986) causal approach. The initial causal variable was collaborative culture (CC), the criterion variable was organizational performance (OP), and the mediating variable was ISQ (ISQ). The results reveal that the total effect of CC on OP was significant,  $c = .453, p < .001$ . CC was significantly predictive of hypothesized mediating variable, ISQ;  $a = .478, p < .001$ , when controlling for CC, ISQ was significantly predictive of OP,  $b = .628, p < .001$ . The estimated direct effect of CC on OP, controlling for ISQ, was  $c' = .153, P < .001$ . The indirect effect,  $ab$ , was .300. This was judged to be statistically insignificant using Sobel (1982) test,  $z = 8.53, p < .0001$ . The coefficients for both  $a$  and  $b$  were found statistically significant, the Sobel test for the  $ab$  product was also significant, the direct effect from CC on OP ( $c'$ ) was also statistically significant. Since the Sobel test results were significant, therefore, the effects of CC on OP were partially mediated by ISQ.

**Discussion**



Internal service quality is an important mean for organizations to stay competitive and ensure continued performance. Literature attests to the benefit of increased collaboration in fostering both service quality and organizational performance. The research studied the relationship between collaborative culture, internal service quality and organizational performance. The overall premise of the model tested was that encouraging and improving internal service quality in the organization can be impacted by increasing collaboration, which in turn would be related to superior organizational performance. Although, the results of the present study are related to the banking sector, the extensive literature review leads us to expect that similar relation would result in other sectors.

The study discovered a significant relationship between CC and POP. A scarcity of empirical studies exist that investigates the influence of collaborative culture on organizational performance. The finding that CC is related to performance is similar to the theory and research studies that has recognized organizational culture as an important driver of better organizational performance and have shown significant influence of organizational culture on organizational performance (Orghanna & Harris, 2000; Lok & Crawford, 2004; Booth & Hamer, 2009). It is recommended that it is of great benefit for the organizations to nurture a collaborative organizational culture by instituting mechanisms and structures that focus on creation of environment where workers share an understanding and further aid in the development of support, care, and cooperation among employees. The findings that reveal influence of culture on performance are still mixed and further research needs to be conducted on the nexus between culture and organizational performance. The results revealed a significant impact of CC on ISQ. Hardly any evidence in the literature is found that tested the influence of CC on ISQ. However literature does show the influence of different forms of culture on ISQ. The findings of the present study are also similar to the findings of Agbenyiga (2011), who found a significant influence of organizational culture on service quality. The significance imply that the business should focus on organizational culture. Different forms of culture may shape ISQ differently. The positive impact of cooperation, collaboration, respect and value is well established in the literature. An existence of these norms within the organization certainly carries its weight in deliverance of quality, since employees become more approachable, connected and easy to communicate with. The analysis revealed a significant influence of ISQ on POP. Study by Bellou and Andronkidis (2008) has shown significant positive influence of ISQ on organizational performance. The results reveal a higher degree of responsiveness in bank employees. The results reveal a significant level of responsiveness by the employees towards their coworkers, this is a significant factor of ISQ (Zhen-You, 2003), and this improved attitude towards coworkers helps in attaining improved organizational performance. Responsiveness

corresponds to the fact that bank employees deliver timely service, since operations in bank are interconnected to each other, provision of timely service to coworkers can significantly enhance quality of service provided to the customers, and subsequently would lead to the customer retention, as well as help in achieving maximum profits.

The mediating effect helps assess whether the relationship between two variables is direct or whether it occurs indirectly through some third (i.e., mediating) variable (Shaver, 2005). Mediation analysis proved partial mediation between collaborative culture and perceived organizational performance. This showed that the relationship between collaborative culture and ISQ to a certain extent (partially) occurs through the mediating variable ISQ. ISQ when used a mediator showed partial mediation between collaborative culture and organizational performance. Similarly, this shows that higher level of collaboration increase an employee's drive to perform well, this initiates positive behaviours among employees, and they are willing to show discretionary behaviours and also prepared to get involved with other employees. The enthusiasm and conviction of employees is communicated to the coworkers and hence facilitates employee performance that significantly improves the organizational performance.

### **Conclusion**

The overarching goal of this research was to examine whether ISQ acts as a mediator between collaborative culture, a dimension of organizational culture and organizational performance. The lack of research in this area highlights a knowledge gap. This study aims to address this gap and in doing so provide directions to sustain and improve business performance. Literature highlights that culture has a positive impact on ISQ, and furthermore ISQ has a significant positive impact on organizational performance, based on this causal relationship it was hypothesized that there is an indirect influence of culture on organizational performance, mediated by ISQ. Extensive review of literature led to the development of empirically testable hypotheses.

The population of the study was drawn from Karachi Stock Exchange (KSE) with banks having more than five branches in the city of Peshawar. Stratified random sampling technique was utilized with banks divided into two strata of medium and large banks. Questionnaire was drafted based on the existing constructs from previous studies and was tested using Dillman (2000) four stages of validation. A few items were removed during the pre-testing phase.

The first structural model evaluated the influence of collaborative culture on ISQ. The results showed that collaborative culture had significantly positive impact on ISQ. Based on the findings of this structural model, the research concludes that for the banks to improve the level of ISQ, the banks should make efforts to increase the level of collaboration, the higher the level of collaboration the higher

would be the level of service the coworkers provide to each other. Collaboration was found to have a significant positive impact on perceived organizational performance. Although there is lack of research that explicitly investigates the influence of collaborative culture on organizational performance, literature does ascertain the positive impact on organizational performance. The significant impact on perceived organizational performance further strengthened the theoretical assertion that also showed significant positive relationship between culture and performance, furthermore adding vigor to the assertion that organizations shall continue to invest in the means to encourage collaboration.

The study also evaluated the impact of ISQ on subjective measure of organizational performance. The results indicated that ISQ had a significant positive impact on the subjective organizational performance. The finding strengthens the assertion that unless organizational focus on the service received by coworkers, the organization cannot attain adequate level of profitability and may not be able to ensure external service quality that would ultimately harm business performance. Furthermore, the research main interest was if ISQ acts as a mediator between collaborative culture and organizational performance. The finding was partially supported in case of mediation between collaborative culture and perceived organizational performance. The mediated effect of ISQ is important to top management, implying their responsibility for investing to create an environment that nurtures trust, understanding, commitment, provision of timely service, and positivity in attitude and behavior. Management which expects to reap benefits of service quality must understand the need of better ISQ and should invest in the intangible factors that have been proven to affect the tangible profits. Banks operate under tight guidelines; it is for the management to understand that each bank branch is supplied with adequate and well trained staff, tangible resources to carry out office duties, training schedules, employee support programs and clear reward management system that fosters collaboration, support, togetherness and collectivity.

The present research has strong practical implications. First and foremost the research study shows it is not only external service quality that adds to the profitability of the organizations. The research has displayed significant influence of ISQ on both perceived and objective measures of organizational performance. This shows that it is imperative for the banks to ensure that they take initiatives that foster ISQ. Furthermore, a new paradigm is added to existing research that has repeatedly evaluated the influence of different culture on organizational performance, the influence is mediated, although partially by ISQ implies that executives should be moving ahead by considering implementation of initiatives that further strengthen ISQ with the expectation for a business performance improvement. Investment involves activities that clearly highlight distinct job roles, learning

initiatives that help short and long term development, communication and development of believe in the mission and vision, and concrete rewards for performance. Failure to make proper consideration for improvements in ISQ may seriously affect organizational performance, since employees may not be able to provide timely and adequate service desired by their coworkers.

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