

# The Impact of Service Quality on Customer Satisfaction in Banking Sector of Karachi

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## Abstract

*In Pakistan, the banking sector after privatization and liberalization of the economy has become highly competitive. It has become difficult for banks to retain existing customers and attract new ones. By providing a quality service, banks can have a satisfied consumer base. Thus, this study aims to measure the effect of tangibility, reliability, responsiveness, empathy and assurance on customer satisfaction in the banking sector of Karachi. This research has extended the SERVQUAL model for meeting the research objectives. The population for this study are the customers in the banking sector and the sample size consists of 403 respondents. After pilot testing, questionnaires were administered to the respondents through the mall intercept method. The model explained the effect of service parameters on customer satisfaction. The study finds that the strongest predictor of customer satisfaction was responsiveness ( $R^2 = .53$ ) followed by reliability ( $R^2 = .51$ ), tangibility ( $R^2 = .48$ ), assurance ( $R^2 = .44$ ) and empathy ( $R^2 = .39$ ).*

**Keywords:** Service Quality, Customer Satisfaction, Tangibility, Reliability, Responsiveness Empathy, Assurance.

## Introduction

Service quality plays a significant role in conventional and service industries. Customer satisfaction in the service industry depends on the quality of service and overall experience. Firms with a satisfied customer base have a competitive edge over others (Arokiasamy & Huam, 2014). Banks are key institutions in the financial system and an economy significantly depends on the efficiency of the banking sector. In the corporate world, service quality plays an important role in creating differentiation and a satisfied customer base. After privatization of

several Pakistani banks, the emphasis on service quality has increased significantly. In addition, customer expectation of service quality has also increased proportionately. Customers now demand high quality services from banks. Banks aim to build a competitive advantage through high quality services and by developing a loyal customer base. A satisfied customer base also helps in increasing market share (Khan & Mariam, 2014). Many leading firms focus on providing quality services for creating differentiation and competitive advantage. This leads to a stronger brand image. The SERVQUAL model has been

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used extensively by marketers for measuring customer satisfaction (Arokiasamy & Huam, 2014).

Customer satisfaction is a psychological state. Customers are highly satisfied when service quality exceeds their expectations (Paul, Mittal, & Srivastav, 2016a). It is believed that satisfied customers keep a sustainable relationship with the company by regularly purchasing its products and services (Kashif, Suzana, Shukran, & Rehman 2015). Several studies have found that service quality has a significant effect on customer satisfaction (Loke, Taiwo, Salim, & Downe, 2011). A high quality service leads to competitive advantage, satisfied customer base and improved bottom-line for the company. Parasuraman & Ziethaml (1988) developed a model containing five service quality dimensions, i.e. Tangibility, Reliability, Responsiveness, Empathy, and Assurance. This instrument is known as SERVQUAL five-factor model that is now commonly used for measuring service quality (Paul, Mittal, & Srivastav, 2016b).

Prior research suggests that three factors affect customer satisfaction, i.e. perceived value, service quality and corporate image. Banks can enhance customer satisfaction if they can create a strong brand image. This study examines the impact of service quality on customer satisfaction in the banking sector of Karachi. More specifically, it determines the effect of service quality dimensions i.e. tangibility, reliability, responsiveness, assurance and empathy on customer satisfaction.

## Literature Review

### Customer Satisfaction

Customer satisfaction has been an extensive

research topic as it helps organizations achieve excellence and profitability. Firms give a high priority to customer satisfaction as it is less expensive to retain existing customers than attract new ones (Hussain, Nasser, & Hussain, 2014). Profitability and survival of firms depend on satisfied customers. Customer satisfaction is very important in the service industry such as banking. Thus, banks are not only diversifying their operations for satisfying customers but they are also incorporating quality dimensions in their strategic plans.

By providing high quality services, banks can satisfy their customers which can lead towards a sustainable competitive advantage (Baghla & Garai, 2016). Satisfied customers will not only lead to sustainable growth but will also enhance profitability and market share (Al-Azzam 2015). According to American Customer Satisfaction Index, "customer satisfaction is greater quality-pull than price-pull and value-pull." Research suggests that satisfaction results in a positive consumer attitude towards goods and services (Bharwana, Bashir, & Mohsin, 2013). Additionally, it also positively affects perceived quality and enhances the customer-organizational relationship. Thus, both product and service quality help in attracting and retaining customers (Al-Azzam, 2015). Satisfaction positively affects firm profitability and it is the foundation of customer loyalty, repeat purchase and word of mouth communication. Earlier studies examining the effect of quality on satisfaction found that dissatisfied customers not only stop purchasing the products and services but also create negative publicity. On the contrary, satisfied customers are likely to become strong advocates of products and help in creating a positive image (Angelova & Zekiri,

2011).

### Service Quality

Service quality is not only a continuous interaction between customers and organizations but it also provides better solutions to customer problems. Thus, companies can only have a competitive advantage if they provide high quality services. Besides the quality of actual service, consumer perception on the service quality is also important. If there is a gap between the two, companies may be required to revisit their strategy.

Satisfied customers will not only give positive inputs to firms but will communicate the same to others. Customer satisfaction mainly depends upon: (1) reliability (2) security (3) responsiveness (4) competence (5) tangibility (6) credibility (7) communication (8) courtesy (9) understanding the customers (10) responsiveness and (11) service accessibility (Parasuraman & Zeithaml, 1988). SERVQUAL scale is a commonly used tool for measuring the quality of services. Factors including reliability, responsiveness, assurance, empathy and tangibility tend to be highly correlated. Although other models for measuring service quality are available, researchers tend to prefer the SERVQUAL model because of its simplicity in measuring service quality (Paul et al., 2016b). As banking has become highly competitive, banks are focusing on building long term relationships, enhancing satisfaction and loyalty through the provision of premium services (Mubbsher Munawar Khan & Fasih, 2014).

Service quality depends on the gap between performance and expectation. This study has used five factors for measuring satisfaction. Reliability refers to a company's ability to

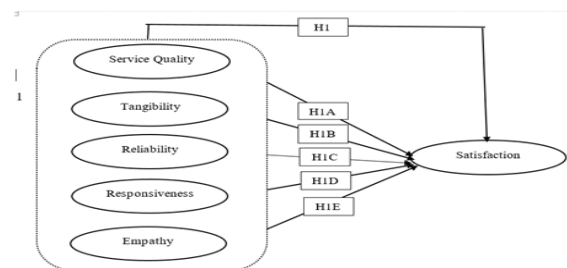
deliver its services on time. Responsiveness is a company's promptness in addressing customer complaints. Assurance refers to a firm's ability to respond to customer queries. Empathy is a level of caring extended to customers. Tangibility refers to the facilities, personnel, and communication materials used by firms (Kashif et al., 2015). Thus, companies try to gain a competitive advantage by providing premium services to their customers.

Factors such as actual extended service, service quality perception and trust positively affects satisfaction level (Khan & Fasih, 2014). Success in banking is highly dependent on the quality of services. Banks are fully aware of their importance, therefore, they incorporate service aspects in their value proposition. Banks that provide better services than their competitors will have a stronger brand image (Irfan, Ghafoor, Akhtar, Hafeez & Rehman, 2014).

### Conceptual Framework

The conceptual framework is presented in Figure 1. The literature support for the relationships depicted in the conceptual framework are discussed in the following sections:

Figure 1: Conceptual Framework



### Service Quality and Customer Satisfaction

To remain competitive, firms must

understand the importance of service quality and its impact on customer satisfaction. Thus, firms tend to rely on service quality for gaining sustainable competitive advantage. Several studies found that satisfaction affects customer loyalty, retention and organizational profitability (Angelova & Zekiri, 2011).

Customer satisfaction depends on the consumer experience while utilizing the services. Therefore, firms ensure that their customers have a memorable and delightful experience while consuming the services. Some studies have argued that since satisfaction depends on transactions, attitudes towards a product will have more enduring effect on the image of firms (Arokiasamy & Tat, 2014). Others believe that service quality has a greater impact on consumer satisfaction than product and price. Improved service quality by banks helps in developing attitudinal loyalty which is a prerequisite for customer retention. Thus, service quality has a strong influence on customer satisfaction (Bharwana et al., 2013).

In addition, service quality is also considered an important tool for developing and maintaining sustaining relationship with customers. It is more important for banks and financial institutions as they have few options for creating product differentiation (Al-Azzam 2015). Lower perceived quality results in higher dissatisfaction (Omar, Saadan, & Seman, 2015). While examining the effect of service quality on satisfaction, some studies have found that service quality does not affect satisfaction as it is an antecedent to satisfaction. Others maintain that customer satisfaction is the end-result of service quality (Hussain et al., 2014). Banking sector thus makes deliberate efforts for

providing premium services to its customers. Firms perpetually measure and monitor their services quality for ensuring that their customers are highly satisfied and loyal to them. If banks meet customer demands and expectations then they would not have any problem in having a high-level customer base (Sureshbab, Devasenathipathi, & Vijay, 2014).

If the overall experience of customers is positive it is an indication that they are highly satisfied. In this context, studies also found that satisfaction alone might not guarantee repurchase, customer retention or loyalty. The other marketing factors are important as well. Whilst validating the effect of service quality on satisfaction some studies found that a higher satisfaction level leads to higher retention and brand loyalty. Banks have little margin to play with because of competition and statutory regulations. Therefore, they are highly dependent on service quality for retention of customers, developing brand loyalty and earning higher profits (Khan & Fasih, 2014). Although satisfaction and services are highly correlated but they are different concepts. The former is a broader concept, whereas the latter mainly focuses on dimensions of service quality. Factors such as product and price influence satisfaction but their effects are not as strong as service quality (Arokiasamy & Tat, 2014).

### **Tangibility and Customer Satisfaction**

Tangibility refers to things that have a physical existence, which could be seen, felt and touched. From a banking perspective it included the technological equipment and ambience of branches including employees (Khan & Fasih, 2014). Tangibility is a significant aspect of customer satisfaction in the service

industry especially banks. As the products of banks and service industry are intangible, they have to rely heavily on the tangible aspects for satisfying customers. Customers tend to extensively switch from one bank to another (Iberahim, Taufik, Adzmir, & Saharuddin, 2016). One reason for this is that banks are not giving due importance to tangible aspects. Customer satisfaction and retention strongly depends on tangibles including modern equipment, ambience and staff. Therefore, banks must improve these tangible aspects. Tangibles are significant for creating differentiation, customer satisfaction and sustainable growth (Arokiasamy & Tat, 2014). Customer satisfaction in banking significantly depends on both tangible and intangible aspects. Therefore, combining both tangible and intangible aspects in the value proposition can lead to greater satisfaction among customers and sustained relationships (Khan & Fasih, 2014). Some studies argue that service quality positively influence the profitability of an entity (Irfan et al., 2014).

Realizing the importance of service quality, General Electric (GE) was able to earn large profits by making huge investments on various service quality aspects. Realizing the importance of tangible aspects, GE made drastic changes in branches that made them more noticeable and appealing to customers. Banks must also improve its tangible and non-tangible aspects. These improvements will enhance customers satisfaction and help foster a long term relationship between banks and clients (Khan & Fasih, 2014).

### **Reliability and Customer Satisfaction**

From a consumer perspective, reliability refers to how efficiently firms are addressing

their problems and how accurately they maintain customer records (Parasuraman & Zeithaml, 1988). Customers prefer those firms that keep their promises and communicate the same to them. In the banking industry, reliability can be interpreted as on time delivery of services (Hussain et al., 2014). Reliability has been found to be an important aspect that promotes high level of customer relationships (Parasuraman & Zeithaml, 1988). Several studies found that reliability is an important component of SERVQUAL and it positively effects customer satisfaction. Various studies found that service quality affects customer satisfaction including reliability (Kashif et al., 2015). Adoption of technology will also give an edge to firms and will help in providing reliable services. Consequently, this will make the customers highly satisfied (Khan & Fasih, 2014).

### **Responsiveness and Customer Satisfaction**

Responsiveness indicates how efficiently a firm addresses customer queries and provides solutions to their problems. In this context, it is important for firms to understand customer needs in terms of their daily operations and make these operations safe and efficient (Parasuraman & Zeithaml, 1988). Studies have found that responsiveness is not only an important component of service quality model but it also has a positive effect on customer satisfaction (Al-Azzam 2015). If employees are highly responsive to customer queries it will lead to a higher level of customer satisfaction (Al-Azzam 2015). The responsiveness level is strongly dependent on the attitude and behavior of employees. Thus, it is important for firms to give required orientation to their employees on customer dealings on a regular basis. Consequently, this will lead to higher



customer satisfaction and better relationship with firms (Loke et al., 2011).

### **Empathy and Customer Satisfaction**

Empathy refers to how firms understand and solve customer problems and issues (Parasuraman & Zeithaml, 1988). Thus, it is important for banks to be empathic with their customers while addressing their queries and problems. If they are able to do that they will not only have a competitive edge but will have highly satisfied customers. Studies have found that empathy positively affects customer satisfaction (Flick, 2015). Other studies have concluded that customers will not be satisfied with service quality if employees lacking empathy (Loke et al., 2011). Therefore, empathetic behavior from employees leads to a positive attitude towards firms which in long run improves their financial health (Khan & Fasih, 2014).

Banks must pay individual attention to customers and their specific needs (Al-Azzam 2015). Banks that are able to give efficient services to customers and are able to resolve their conflicts effectively will have a pool of highly satisfied customers (Khan & Mariam, 2014). It has also been reported that if employees are empathetic to customers they will ignore minor errors and mistakes (Khan & Fasih, 2014). Studies have validated that empathy affects service quality and helps in building a loyal customer base (Al-Azzam 2015).

### **Assurance and Customer Satisfaction**

Assurance refers to the customer trust and confidence in the firm to give the best possible services to them (Arsanam & Yousapronpaiboon, 2014). When employees extend courtesy while providing services, they are indirectly giving assurance to customers that they will solve all

their problems (Khan & Fasih, 2014). Factors such as employee knowledge and courtesy also help in extending trust (Parasuraman & Zeithaml, 1988). Prior studies suggest that trust positively affects customer satisfaction. Customer trust on employees leads to a higher satisfaction level and positively affects purchase intention (Khan & Fasih, 2014).

### **Hypotheses**

Based on the above discussions, the following hypotheses can be developed:

- H1: The predictor variables (i.e. Tangibility, Reliability, Responsiveness, Empathy, and Assurance) have an effect on customer satisfaction
- H1A: Tangibility has a positive impact on customer satisfaction.
- H1B: Reliability has a positive impact on customer satisfaction.
- H1C: Responsiveness has a positive impact on customer satisfaction.
- H1D: Empathy has a positive impact on customer satisfaction.
- H1E: Assurance has a positive impact on customer satisfaction.

### **Methodology**

#### **Population and Sample Size**

The population of this study includes all the bank account holders residing in Karachi. The sample size is a portion of elements drawn from the population, which is analyzed with the assumption that it will have the same characteristic as the research population (Malhotra, Birks, Palmer, & Koenig-Lewis, 2003).

An appropriate sample size for this study at the 95% confidence level and 5% error margin is 384. Thus, the study settled for final sample size of 403.

### Sampling Technique

It is impossible to have a well-defined sample frame for the population of this study. Therefore, non-probability sampling has been used. More precisely, the mall intercept method has been used which is a form of convenience sampling (Saunders, 2011).

### Instrument Development

This study has adopted several constructs from earlier research which have established reliabilities. The questionnaire used in this study has two parts. The first part has demographics which is on a nominal scale. The second part is based on the variables used in this study, which are on the five point Likert Scale. The summary of the adopted constructs are depicted in Table 1.

**Table 1 Constructs Adopted**

Construct	No of Items	Author
Customer Satisfaction	4	(Kombo, 2015)
Tangibility	4	(Kashif et al., 2015)
Reliability	4	(Kashif et al., 2015)
Responsiveness	4	(Loke et al., 2011)
Empathy	4	(Loke et al., 2011)
Assurance	4	(Kashif et al., 2015)

### Normality of Data

Normality of the data was ascertained in two ways. Initially all the items were converted to standardized Z scores. Since the standardized Z-Score for all the items ranged between  $\pm 2.5$  therefore it can be safely assumed that the data

is normally distributed. Subsequently, univariate normality of the constructs was examined through skewness and kurtosis analyses. Since values of the skewness and kurtosis also ranged between  $\pm 2.5$ , therefore the data fulfill the requirements of univariate normality (Kline, 2015).

There liability of the constructs was examined through the Cronbach's alpha. Standardized coefficients ranging between 0.6-0.70 are considered acceptable. On the other hand, standardized coefficients above 0.8 are considered good (Patten, 2016).

### Validity

Convergent and discriminant validity are sub-types of construct validity. Construct validity is a test that measures a particular construct (i.e. intelligence). Convergent validity takes two or more measures (items) that are measuring the same construct and shows whether they are related. Discriminant validity shows that the constructs used are distinct and unique (Rowley, 2014).

### Exploratory Factor Analysis (EFA)

EFA is a technique used to reduce the data set to a smaller set of summary variables for understanding theoretical structure of the phenomena. It helps in identifying the structure of the relationship between the variable and the respondents. The two commonly used methods for exploratory factor analysis are Principal component factor analysis and common factor analysis. Principal component factor analysis helps in deriving minimum numbers of factors and explaining variance of the original values.

Common factor analysis is used when the nature of the factors to be extracted and common variance errors are not known (Walliman, 2015). In this study principal component factor analysis is used.

### Regression Analysis

Regression analysis helps in measuring relationships between variables. It also helps researcher to know whether a relationship exists between two or more variables. It also tells the strength, structure and form of relationships. The difference between the correlation and regression analyses is that the former determines correlation or association of two or more variables, whereas the later describes how independent variables and dependent variables are numerically related. Correlation shows a liner relationship between two variables, whereas regression gives best line fit and estimates the effect of one variable on other. Thus in correlation there is no independent and dependent variables, whereas in regression there is at least one independent and one dependent variable (Malhotra et al., 2003).

## Results

### Descriptive Statistics

Kurtosis and Skewness analyses was undertaken for measuring the univariate normality. The summarized results are presented in Table 2.

**Table 2: Descriptive Statistics**

Construct	Mean	Std.Dev.	Skewness	Kurtosis
Tangibility	3.58	1.25	-0.54	-0.94
Reliability	3.91	1.07	-0.80	-0.51

Responsiveness	3.91	1.09	-0.83	-0.37
Empathy	3.79	1.14	-0.69	-0.65
Assurance	3.85	1.00	-0.64	-0.44
Customer Satisfaction	3.65	1.13	-0.43	-0.93

Table 2 shows that responsiveness with a (Mean=3.91, SD= 1.09) has the highest Skewness (SK=-0.83) and customer satisfaction with a (Mean= 3.65, SD= 1.13) have the lowest Skewness (SK=-0.43). The highest Kurtosis (KT=-0.94) is for tangibility with a (Mean = 3.58, SD=1.25) and the lowest Kurtosis is (KT=-0.37) for responsiveness (Mean=3.91, SD= 1.09). Since all the constructs adopted for this study are within the range of  $\pm 2.5$  therefore, all of them fulfill univariate normality requirements (Flick, 2015).

### Reliability Analysis

Internal consistency of the constructs were examined through the Cronbach's alpha. The results are depicted in Table 3.

**Table 3: Reliability Analysis**

Construct	Cronbach's Alpha	Standardized Cronbach's Alpha	Mean	Standard Deviation
Tangibility	.88	.88	3.58	-0.94
Reliability	.79	.79	3.91	-0.51
Responsiveness	.82	.82	3.91	-0.37
Empathy	.82	.82	3.79	-0.65
Assurance	.73	.73	3.85	-0.44
Customer Satisfaction	.80	.80	3.65	-0.93

The reliability values as shown in Table 3



varies between ( $\alpha = 0.88$  to  $\alpha = 0.73$ ). The lowest reliability is for assurance ( $\alpha = .73$ , Mean=3.85, SD=-0.44) on the other hand the reliability for tangibility is highest ( $\alpha = .88$ , Mean=3.51, SD=-.09). All the Standardized Cronbach's Alpha values are greater than 0.7, indicating acceptable reliability (Leech, Barrett, & Morgan, 2015).

### Correlation Analysis

Correlation analysis was carried out for ascertaining multicollinearity and ensuring whether the constructs used in the study are unique and distinctive. Refer to Table 4 for the summarized results.

**Table 4: Correlations**

Construct	1	2	3	4	5	6
Tangibility	1.00					
Reliability	0.57	1.00				
Responsiveness	0.63	0.56	1.00			
Empathy	0.51	0.53	0.50	1.00		
Assurance	0.51	0.53	0.50	1.00	1.00	
Customer Satisfaction	0.50	0.50	0.57	0.47	0.48	1.00

The highest correlation is between responsiveness and tangibility. In addition, the lowest correlation is between customer satisfaction and empathy. As the correlations are between .30 and .90 there is no issue of multicollinearity and all the constructs are distinctive.

### Exploratory Factor Analysis (EFA)

The relationship between latent variables and the constructs were ascertained through Varimax Rotation. Table 5 contains the

summarized results.

**Table 5: EFA for the Constructs**

Construct	KMO <sup>1</sup>	BST <sup>2</sup>	CFL <sup>3</sup>	Items
Tangibility	.827	899.584	74.78%	4
Reliability	.784	446.434	61.43%	4
Responsiveness	.773	586.647	64.92%	4
Empathy	.783	577.538	65.25%	4
Assurance	.704	344.073	55.66%	4
Customer Satisfaction	.773	485.294	62.46%	4

1. Kaiser-Mayer-Olkin Test, 2. Bartlett's Sphericity Test  
3. Cumulative Factor Loading Test

Factor loadings for each construct is greater than 0.6 which is acceptable (Hair, 2015).

### Convergent Validity

For convergent validity, the variance explained for each variable should be greater than .40 and the Cronbach's alpha should be higher than .70. The results depicted in Table 6 confirm that the data converges and fulfills convergent validity requirements.

**Table 6: Convergent Validity**

Construct	Alpha <sup>1</sup>	VE <sup>2</sup>	Mean	STD. <sup>3</sup>
Tangibility	.88	.74	3.58	-0.94
Reliability	.79	.61	3.91	-0.51
Responsiveness	.82	.64	3.91	-0.37
Empathy	.82	.65	3.79	-0.65
Assurance	.73	.56	3.85	-0.44
Customer Satisfaction	.80	.62	3.65	-0.93

1. Cronbach's Alpha, 2. Variance Explained 3. Standard Deviation

Table 6 shows that variance explained is as high as (VE=.74) for tangibility (and as low as (VE=.61) for reliability. The lowest Cronbach's alpha is for assurance ( $\alpha$ =.73). On the contrary, the Cronbach's alpha for tangibility is the highest ( $\alpha$ =.88). Since the variance explained and Cronbach's alpha values are greater than 0.40 and 0.7 respectively, the constructs satisfy the convergent validity requirements (Kline, 2015).

### Hypothesis 1 (Testing Overall Model)

The hypothesis that the predictor variables have a significant effect on customer satisfaction was tested through multiple regression (refer to Table 7).

**Table 7: Summarized Regression Results**

	Beta (Std.)	T	Sig.
Constant		-5.04	0.00
Tangibility	0.18	5.29	0.00
Reliability	0.28	8.24	0.00
Responsiveness	0.27	7.49	0.00
Empathy	0.23	7.17	0.00
Assurance	0.14	4.25	0.00

Dependent Variable: Satisfaction,  $R^2$  = .76, Adjusted  $R^2$  = .70,  $F$  = (5, 396) = 246.43,  $p$  < 0.05.

The results show that the predictor variables (i.e. tangibility, reliability, responsiveness, empathy and assurance) collectively explain 76% of the variance in customer satisfaction ( $F$  (5, 396) = 246.43,  $p$  < 0.05). It was also found that reliability ( $\beta$  = .28,  $p$  < .05) significantly affects customer satisfaction alongside responsiveness ( $\beta$  = .27,  $p$  < .05); empathy ( $\beta$  = .23,  $p$  < .05); tangibility ( $\beta$  = .18,  $p$  < .05) and assurance ( $\beta$  = .14,  $p$  < .05).

### Hypothesis 1A: Tangibility and Customer Satisfaction

The hypothesis tangibility significantly affects customer satisfaction was tested through simple regression analysis. The results in summarized form are presented in Table 8.

**Table 8: Summarized Results (Simple Regression)**

	Beta (Std.)	T	Sig.
Constant		11.515	.000
Tangibility	.707	19.205	.000

Dependent Variable: Satisfaction,  $R^2$  = .488,  $F$  (5, 396) = 368.832,  $p$  < 0.05.

The regression results show that tangibility explains 48.8% of the variance in customer satisfaction ( $R^2$  = .488,  $F$  (5, 396) = 368.832,  $p$  < .05). It was also found that tangibility has a significant positive influence on customer satisfaction.

### Hypothesis 1B: Reliability and Customer Satisfaction

The hypothesis reliability positively affects customer satisfaction was tested through simple regression analysis method. Table 9 presents the summarized results.

**Table 9: Summarized Results (Regression)**

	Beta (Std.)	T	Sig.
Constant		4.698	.000
Reliability	.718	20.642	.000

Dependent Variable: Satisfaction,  $R^2 = .515$ ,  $F(1, 401) = 426.075$ ,  $p < 0.05$ .

The regression results indicate that reliability explains 51.5% of the variance in customer satisfaction ( $R^2 = .515$ ,  $F(1, 401) = 426.075$ ,  $p < 0.05$ ). Moreover, reliability has a significant positive influence on customer satisfaction.

### Hypothesis 1C: Responsiveness and Customer Satisfaction

The hypothesis responsiveness positively affects customer satisfaction was tested through simple regression analysis. Table 10 presents the summarized results.

**Table 10: Summarized Results (Simple Regression)**

	Beta (Std.)	T	Sig.
Constant		4.920	.000
Responsiveness	.728	21.628	.000

Dependent Variable: Satisfaction,  $R^2 = .530$ ,  $F(1, 404) = 452.334$ ,  $p < 0.05$ .

The regression results indicate that the predictor variable responsiveness explains 53% of the variance in customer satisfaction ( $R^2 = .53$ ,  $F(1, 404) = 452.334$ ,  $p < 0.05$ ). It was also found that responsiveness has a significant positive influence on customer satisfaction.

### Hypothesis 1D: Empathy and Customer Satisfaction

The hypothesis empathy positively affects customer satisfaction was tested through regression analysis. The summarized results are presented in Table 11 below:

**Table 11: Summarized Regression Results**

	Beta (Std.)	T	Sig.
Constant		8.394	.000
Empathy	0.630	16.242	.000

Dependent Variable: Satisfaction,  $R^2 = .397$ ,  $F(1, 401) = 263.819$ ,  $p < 0.05$ .

The regression results indicate that the empathy explains 39.7% of the variance in customer satisfaction ( $R^2 = .397$ ,  $F(1, 401) = 263.819$ ,  $p < 0.05$ ). It was also found that empathy has a significant positive influence on customer satisfaction.

### Hypothesis 1E: Assurance and Customer Satisfaction

The hypothesis assurance positively influences customer satisfaction was tested by simple regression analysis. Table 12 below shows the results.

**Table 12: Summarized Regression Results**

	Beta (Std.)	T	Sig.
Constant		7.528	.000
Assurance	.634	16.375	.000

Dependent Variable: Satisfaction,  $R^2 = .442$ ,  $F(1, 401) = 316.638$ ,  $p < 0.05$ .

The results shows that assurance explains 44.2% of the variance in customer satisfaction ( $R^2 = .442$ ,  $F(1, 401) = 316.638$ ,  $p < 0.05$ ). ). It was also found that assurance has a significant positive influence on customer satisfaction.

### Discussion of Results

The results and their relevance to previous studies are discussed in the following paragraphs.

The hypothesis that predictor variables (i.e.

tangibility, reliability, responsiveness, empathy, and assurance) significantly effects customer satisfaction was accepted (Refer to Table 7). These results are consistent with many prior studies on the subject (Loke et al., 2011; Omar et al., 2015).

The hypothesis that tangibility positively effects customer satisfaction was also accepted (Refer to Table 8). Tangibility helps in building competitive edge and differentiation, which is necessary for survival. Prior studies have found that tangible aspects, such as the decorum of the branches, will increase customer satisfaction (Arokiasamy & Tat, 2014). Ambiance enhances customer perception of satisfaction which leads to positive attitude towards service providers. Moreover, service providers are combining tangible and intangible attributes to create a competitive value proposition (Khan & Fasih, 2014).

The hypothesis that reliability positively effects customer satisfaction was also accepted (Refer to Table 9). Earlier studies have found a significant positive relationship between reliability and customer satisfaction. This relationship was found to be true for both financial and non-financial firms. Technology innovation and diffusion provides an array of choices to service delivery standards and services marketing strategies. If technology is adopted appropriately it will provide a competitive advantage and increased productivity (Khan & Fasih, 2014).

The hypothesis that responsiveness positively effects customer satisfaction was also accepted (Refer to Table 10). The service industry including banks have to utilize technology to cater to the needs of customers. If the service

industry is responsive to customers' complaints it will enhance the level of association between the two groups. It is important for banks to stay abreast with customer needs and adopt appropriate measures to cater them (Iberahim et al., 2016).

The hypothesis that empathy positively effects customer satisfaction was also accepted (Refer to Table 11). Prior research have found a significant correlation between empathy and customer satisfaction (Khan & Fasih, 2014). Empathy is necessary for winning customer loyalty. It improves service quality which consequently leads to customer loyalty and satisfaction. Empathy not only changes customer attitude and behavior but it also acts as a moderator between service quality and customer satisfaction (Al-Azzam 2015).

The hypothesis that assurance positively effects customer satisfaction was also accepted (Refer to Table 12). Assurance refers to the level of service courtesy provided by employees to customers (Loke et al., 2011). Several studies have found a strong linkage between assurance and customer satisfaction (Khan & Fasih, 2014; Loke et al., 2011).

## Conclusion

The conceptual model adequately explains the attitude of banking customers in Karachi towards service quality. Inconsistent with prior research, this study finds that customers give less importance to empathy as compared to other service parameters. One of the reasons for this finding could be the prevailing cultural norms of the society. The study also found that banking customers in Karachi give importance to responsiveness, followed by reliability, tangibility and assurance.

## References

- Al-Azzam , D. A. F. M. (2015). The Impact of Service Quality Dimensions on Customer Satisfaction: A Field Study of Arab Bank in Irbid City, Jordan. *European Journal of Business and Management*, 7(15), 45-53.
- Angelova , B., & Zekiri, J. (2011). Measuring Customer Satisfaction with Service Quality Using American Customer Satisfaction Model (ACSI Model). *International Journal of Academic Research in Business and Social Sciences*, 1(3), 232-258.
- Arokiasamy, A. R. A., & Huam, H. T. (2014). Assessing the relationship between service quality and customer satisfaction in the Malaysian automotive insurance industry. *Middle-East Journal of Scientific Research*, 20(9), 1023-1030.
- Arokiasamy , A. R. A., & Tat, H. H. (2014). Assessing the Relationship Between Service Quality and Customer. *Middle-East Journal of Scientific Research*, 20(9), 1023-1030.
- Arsanam, P., & Yousapronpaiboon, K. (2014). The Relationship between Service Quality and Customer Satisfaction of Pharmacy Departments in Public Hospitals. *International Journal of Innovation, Management and Technology*, 5(4), 261-275.
- Baghla, A., & Garai, A. (2016). Service quality in the retail banking sector-A study of selected public and new Indian private sector banks in India. *IJAR*, 2(6), 598-603.
- Bharwana, T. K., Bashir, M., & Mohsin, M. (2013). Impact of Service Quality on Customers' Satisfaction: A Study from Service Sector especially Private Colleges of Faisalabad, Punjab, Pakistan. *International Journal of Scientific and Research Publications*, 3(5), 1-7.
- Flick, U. (2015). *Introducing research methodology: A beginner's guide to doing a research project*. United Kingdom: Sage.
- Hair, J. F. (2015). *Essentials of business research methods*: ME Sharpe.
- Hussain, R., Nasser, A. A., & Hussain, Y. K. (2014). Service Quality and Customer Satisfaction of a UAE based Airline: An empirical investigation. *Journal of Air Transport Management*, 167-175 .
- Iberahim, H., Taufik, N. K. M., Adzmir, A. S. M., & Saharuddin, H. (2016). Customer Satisfaction on Reliability and Responsiveness of Self Service Technology for Retail Banking Services. *Procedia Economics and Finance*, 37(3), 13-20.
- Irfan, R. S., Ghafoor, O., Akhtar, N., Hafeez, I., & Rehman, A. u. (2014). Factors Affecting Customer Satisfaction in Banking Sector of Pakistan. *International Review of Management and Business Research*, 3(2), 1014-1025.
- K, C., Oyerinde J. , A. A. A. O., & Eweoya , A. I. O. (2016). E-banking users' behaviour: e-service quality, attitude, and customer satisfaction. *International Journal of Bank Marketing*, 34(3), 347-367.
- Kashif, M., Suzana , S., Shukran, W., & Rehman , M. A. (2015). Customer satisfaction and loyalty in Malaysian Islamic banks: a PAKSERV investigation:. *International Journal of Bank Marketing*, 33(1), 23-40.
- Khan, M. M., & Fasih, M. (2014). Impact of Service Quality on Customer Satisfaction and Customer Loyalty: Evidence from Banking. *Pakistan Journal of Commerce and Social Sciences*, 8(2), 331- 354.
- Khan, M. M., & Mariam, F. (2014). Impact of Service Quality on Customer Satisfaction and Customer Loyalty: Evidence from Banking Sector. *Pakistan Journal of Commerce & Social Sciences*, 8(2), 331-354.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*: Guilford publications.
- Kombo, F. (2015). Factors for customer satisfaction and customer dissatisfaction in commercial banks. *Mediterranean Journal of Social Sciences*, 6 (4S2), 584-589.



- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2015). IBM SPSS for intermediate statistics: Use and interpretation: Routledge.
- Loke, S. P., Taiwo, A. A., Salim, H. M., & Downe, A. G. (2011). Service Quality and Customer Satisfaction in a Telecommunication Service Provider. Paper presented at the International Conference on Financial Management and Economics, Singapore.
- Malhotra, N., Birks, D., Palmer, A., & Koenig-Lewis, N. (2003). Market research: an applied approach. *Journal of Marketing management*, 27, 1208-1213.
- Omar, H. F. H., Saadan, D. K. B., & Seman, P. K. B. (2015). Determining the Influence of the Reliability of Service Quality on Customer Satisfaction: The Case of Libyan. *International Journal of Learning & Development*, 5(1), 86-89.
- Parasuraman, A., & Zeithaml, V. A. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, Vol.64(No.1), 12-40.
- Patten, M. L. (2016). Understanding research methods: An overview of the essentials: Routledge.
- Paul, J., Mittal, A., & Srivastav, G. (2016a). Impact of service quality on customer satisfaction in private and public sector banks. *International Journal of Bank Marketing*, 34(5), 606-622.
- Paul, J., Mittal, A., & Srivastav, G. (2016b). Impact of service quality on customer satisfaction in private and public sector banks. *International Journal of Bank Marketing*, 34(5), 606-622.
- Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, 37(3), 308-330.
- Saunders, M. N. (2011). Research methods for business students, 5/e: Pearson Education India.
- Sureshbab, B., T.Devasenathipathi, & Vijay, A. N. (2014). Customer Satisfaction on Tangibility of Banking Services in Thanjavur City. *Journal of Research in Commerce & Management*, 3(9), 76-84.
- Walliman, N. (2015). Social research methods: The essentials: Sage.













