Impact of service quality on customer satisfaction in banking industry of Pakistan: A case study of Karachi

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Abstract. Analyzing measures of customers' satisfaction is an immense dilemma because customer is becoming more demanding regarding service quality in banking sector of Pakistan. It is important to understand the impact of service quality on customer satisfaction. Nowadays, the only demand of the customers is to get the good value for their money. Due to increasing market competitiveness no one can deny the significance of service quality. Therefore, it is challenging for the bankers to meet the customer expectation. By reviewing the study, banking sector can have direction to understand the major factors of service quality that influence customers' satisfaction. It also provides understanding that building long term and a strong customer relation is critical for the banking industry. This study provides insight of service quality impact on customer satisfaction in banking sector of Pakistan. This study is based on the core dimensions of service quality i.e. tangibility, responsiveness, assurance, empathy and reliability. To highlight the significance of service quality, customer satisfaction this study based on Karachi market, four hundred branch banking customers district wise were chosen from the branches of four leading banks (HBL, SCBPL, MBL and NBP) to represent four main sectors (Private, International, Islamic and Public) as respondents. A questionnaire instrument based modified SERVPERF scale was used to collect the data. The results of the study suggest customer satisfaction based on service quality dimensions such as tangibility, empathy and assurance having positive and significant relationship. But reliability and responsiveness was not useful estimator for customer satisfaction whereas assurance, responsiveness, tangibility and empathy depict significant impact and positive relationship with customer loyalty. However reliability once again not found as useful estimator of customer loyalty.

Keywords. Customer satisfaction, Service quality, Perceived quality, Performance, Customer expectation.

JEL. L84, L15, L25.

1. Introduction

Today, business dynamics is rapidly changing in terms of competition and quality of services. Due to stiff competition and increasing pressure of globalization, organizations are revisiting the process of their products and services to make it more competitive and better quality driven. Basically, it is the

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quality of products as well as services defined by the customer which assesses the image of company's brand in real terms (Kenyon &. Sen, 2015). The role of customer services is becoming vital in every facet of the industry, as customer is the key to changing the future of any organization. Recent advancement in technology has redefined the relations of customer with its service provider. Due to service intangibility, in most of the services organizations, it is very hard to define the characteristics of good service quality and customer satisfaction; hence, it becomes challenging for service organizations to deliver superior quality (Marić, Marinković & Dimitrovski, 2016). Services are intangible in nature, and that is why it is extremely difficult for organizations to assess how its customer is evaluating and perceiving the end results of service quality.

The main concern of today is to understand the impact of service quality on profit and financial results of the organization. The relationship between service quality and profit is still ambiguous. Customer satisfaction and retaining customer loyalty are both challenging. A study by Oliver (1999) identified that service quality and satisfaction both, are two different but interconnected concepts. It is a principle fact for the services business, that profits can be maximized and minimized with the fluctuation in the level of customer satisfaction. For that reason, service experts always describe customer satisfaction as the key indicator of business performance. The focus of this study is to explore the impact of service quality on customer satisfaction.

Considering financial sector as the backbone for the economic soundness of any country, it can be argued that there exists a significant relationship between financial sector of a country and its economic performance. Countries having a strong financial sector have more tendencies for economic growth. That is, the higher the growth of the banking sector, the higher will be the financial and economic stability in the economy up to the threshold (Law & Singh, 2014). In Pakistan, banking sector is one of the major factors of economic growth. Here, financial sector development took place in an entirely different manner as compared to the banks in the modern world. Researchers like Ahmad, Malik & Humayoun (2010) and The Banker Pakistan (2014) explored the evolution of banking industry that started from having a single private bank acting as government bank also after partition to the period of 2010, when Pakistan banking industry comprised of twenty-five domestic private banks, five commercial banks, six multinational banks, and four specialized banks with a network of total 9348 branches all over Pakistan, serving approximately forty-three million account holders.

The banking industry of Pakistan has seen many changes. There has been a wonderful move in its working condition amid the most recent decade. Today's customers wouldn't settle on anything, not as much as his/her desires. To contend effectively with each other, banks are utilizing distinctive promoting techniques to satisfy the customers' desires and remain ahead in the association. Banks have focused to create procedures to separate themselves from their rivals, and giving their customers top notch banking services and a very innovative experience. Because of the quick evolving condition, service quality, customer satisfaction, and customer loyalty is getting much importance in banking sectors.

Customer service is a basic element in the financial institution to contend in the market driven condition. Estimation of service quality is not an easy task in banking, due to intangibility of services in nature. Nowadays, service quality is being utilized as a vital device by different market players to position them adequately in the market. Further, a satisfied customer is probably going to be a loyal customer who will reuse the bank. The cost of holding current customers by improving product and services is fundamentally lower than the cost of winning new customers. Because the significance of the service quality, customer satisfaction and loyalty are profit driven instruments in banking. The delivery of high service quality is an absolute necessity to accomplish consumer satisfaction and loyalty, and various other attractive behavioral results. This study measures the

level of impact of service quality on customer satisfaction and customer loyalty. While examining the elements influencing service quality, it explains the relationship between service quality with customer satisfaction and customer loyalty in all sectors of banking industry of Pakistan.

A satisfied customer stays with the bank and brings new customers. But the flip side is more severe, as unsatisfied customers not only discontinue their association with the bank, but also keep the new customers at bay by spreading a negative word of mouth. Therefore, banking sector must strive to know what determines the customer satisfaction, as this knowledge will better equip it to make up for its shortcomings, while also enabling it to serve the customers better. This study is being carried out to explore whether the banking sector is familiar with the impact of service quality on customers or not, to create satisfaction, and to build loyalty. Additionally, the study highlights the weak areas where the bank is required to improve its services.

This study reveals the major factors of service quality in banking industry of Pakistan. It explains the relationship and impact of service quality on customer satisfaction. It provides sufficient evidence to the banking sector to improve the service quality standards, plus customer retention and engagement to upgrade the ratings of respective bank in the mind of customer.

Research Objectives

- To determine whether the service quality factors have impact on customer satisfaction
- To develop an empirical model for customer satisfaction
- To identify the useful estimator for customer satisfaction

2. Literature review

The literature focused on relating customer satisfaction and service quality has revealed a positive relationship between the two. This part will highlight existing studies on subject matter under investigation.

2.1. Role of service quality in banks

Contemporary business milieu is an era of customers that considers quality of services as an essential ingredient for success of any business in today's competitive environment. Improving service quality not only enhances their customers' satisfaction but it also helps to increase revenue streams. Kaushik (2013) studied that service quality effects customer's purchase intention; his study proved that loyalty is the most significant factor of service quality, followed by employee tangibles, behavior, and convenience. Kaushik (2013) also conducted research to find out how the various dimensions of service quality impact customer's word-of mouth. It described four dimensions of service quality in retail banking sector, namely: attitude, competence, tangibles and convenience. Ganguli, McKecnie & Roy (2011) also identified four dimensions of service quality which are most valuable and significant for customer satisfaction i.e. customer service, technology security and information quality, technology convenience and technology, usage easiness and loyalty. Customer satisfaction is the most important element in attracting and maintaining the customers, specifically in the banking sector (Ennew, Binks & Chiplin, 2015). This ideology gives rise to the need for researchers and academic individuals to study extensively about service quality, its dimensions, and its impact on customer satisfaction. Public and private sectors banks have also been discussed in this study. Surekha, Anitha & Kaleeswari (2015) highlighted that a very small difference exists between public and private sector banks. If banking management focuses 100% on customer satisfaction, then customer can be retained for long term.

2.2. Customer satisfaction

Nowadays, market has transferred from manufacturing-market to consumer-market. Trivedi (2015) argued that customer has now become the king, and thus, more valuable for the market. Market is now much focused on customer desire, and customer expectation directly affects customer satisfaction. Therefore, knowledge regarding customer satisfaction helps service providing firms to improve their service quality. The level of satisfaction varies from customer to customer; as per their desires, expectations, perceptions and image for the service and product. Reichheld & Sasser (1990) studied 14 different businesses, and concluded that if customer loss reduced by 5%, income progress will increase by 25-95%. Williams, Ashill, Naumann & Jackson (2015) admitted customer satisfaction as the most effective path to success, as customer satisfaction affects customer loyalty and re-purchasing decision. Hsu & Lin (2015) found that customer satisfaction works on customer perception, by comparing pre-purchase expectations with post purchase expectations. They confirmed that there exists a relation between customer real perception and their expectations.

Bitner & Hubbert (1994) defined that customer satisfaction is basically customer evaluation. They defined customer satisfaction as the behavior experienced by the customer after purchasing and consuming the product. It is a process of product quality, service quality, and consumer re-purchases decisions. Customer satisfaction and service quality are interlinked; the better the service quality, the higher will be the level of customer satisfaction (Bitner, & Hubbert, 1994). Baker & Crompton (2000) found customer satisfaction to be the personal experience that is based on the relation between expectations and actual perception. They studied satisfaction to be the outcome of purchasing products and services; it is the experience customer attains from previous purchase. Increased satisfaction increases customer loyalty. Satisfaction is a mental expression, effecting consumers' post purchase behavior, such as praising, complaining, loyalty, attitude, and brand switching.

2.3. Measuring customer satisfaction

Bitner (1990) suggested that service, unlike product, is intangible in nature; and for that, he introduced physical aspect, personnel, and process management, from 4Ps of marketing mix. Churchill & Surprenant (1982) suggested four perceptions:

- Customer Expectation: Before purchasing or consuming product/service, customer begins to expect.
- Product/Service Quality: Customers' perception after purchase can be compared to expectation.
- Disparity: It refers to the difference between service quality and expectation, which occurs during customers' assessment process.
- Customer Satisfaction: Customer satisfaction is met, when both service quality and expectation are identical.

Expanding these perceptions, Temponi, Kuo & Corley (1999) introduced seven aspects of customer satisfaction, namely: service, content, price, convenience, corporate image, equipment, staff, and procedure. Whereas, Grunig & Huang (1998) suggested five dimensions of customer satisfaction, namely: product, service, staff, product performance, and closeness to expectations. According to him, customer satisfaction shows customer attitude. The study also defined rating scale methods to measure customer satisfaction that included the following:

- Simple Satisfaction Scale: It ranges from 7-1; completely satisfied, very satisfied to little satisfied, and 7 as not satisfied.
- Mixed Scale: It ranges from 7-1; from very satisfied to not satisfied, which mark the two ends of the scale.
- Expectation Scale: This scale measures the difference between expectations and perception.

- Attitude Scale: It ranges from 1-3 & 5-7; from like, very much like, to do not like, and dislike very much.
- Emotion Scale: It measure emotions of the customer for service; like positive emotions ensure satisfaction, and negative emotions show dissatisfaction.

Another scale to measure customer satisfaction was introduced by Yau *et. al.,* (2000), known as RMO scale (Relationship Marketing Orientation), which is focused on the relationship between service provider and consumer. This scale is based on six dimensions: trust, bonding, reciprocity, empathy, communication, and shared value. The importance of measuring customer satisfaction has been established; therefore, Zahorik & Rust (1992) found that dissatisfaction is the result of gap between delivered service (performance) and desired service (expectation). Service is a very different process than production. Thus, management must focus on service quality to overcome issues regarding customer satisfaction.

2.4. Association between profit and satisfaction

Parasuraman, Zeithaml & Berry (1988) found customer satisfaction to be correlated with profit; the higher the customer satisfaction, the higher will be the profit of organization. Retaining customer for long-term is more profitable, because he is satisfied with the services and creates a positive image in the mind of other short-term customers. This long-term relation can be helpful for price maintenance and rise in price, because customer is fully satisfied and willing to pay more money to maintain his relationship with the organization. Parasuraman, Zeithaml & Berry (1985) added that the edge of the service is directly linked to customer behavior: when satisfaction is higher than the certain edge, customer repurchase loyalty is also high; when satisfaction is lower than a certain edge, customer repurchase loyalty is also low. Marić, Marinković & Dimitrovski (2016) researched what a firm needs to sacrifice to achieve required edge, and examined that service firms require introduction of some extra benefits to customer like warranties, rework, return policy, and complaint system, so as to improve the level of customer satisfaction.

Trivedi (2015) discovered today's customer to be more demanding than in the past, and thus, it became more challenging to satisfy him. Inadequate services directly create dissatisfaction. Today's customer is more knowledgeable, educated and delicate. Jones, *et al.,* (2003) were more focused on consumer expectations. According to them, the more accurate the level of service instruction, the more satisfied will be the customer. Literature further researched, that customer expectation is directly related to satisfaction. Therefore, it is essential for service provider to focus more on customer satisfaction. In a nutshell, the higher the knowledge regarding use of service, higher will be the satisfaction and lower will be switching behavior. Ennew, Binks & Chiplin (2015) studied banking sector and discovered service quality and customer satisfaction to have a direct impact on customer loyalty. Customer may switch his bank, if dissatisfied. Fečikova (2004) mentioned two types of customers: internal (employees) and external (consumers). If internal customers are dissatisfied and their turnover ratio is high, it automatically affects external customers. Thus, both customers equally need satisfaction.

2.5. Role of customer satisfaction in banks

Kaura (2013) has discussed three dimensions, namely: employee behavior, tangibility, and information technology. Dimensions of service convenience include decision convenience, access convenience, transaction convenience, benefits convenience, and post benefits convenience. According to the research on private sector banks, all dimensions have positive impact on customer satisfaction, except tangibility; and in public sector banks, all dimensions have positive impact on customer satisfaction, except tangibility and benefits convenience. Kaura (2013) further mentioned, that service quality, perceived price fairness, and service

convenience, affect customer satisfaction in the banking sector. Adhikari, Drkingshuk & Nath, Mounita (2014) researched that customer satisfaction has a strong impact on loyalty, repurchase process, awareness, and price flexibility. Loyalty, repurchase process, and awareness are directly proportional to customer satisfaction, while price flexibility is inversely proportional.

2.6. Models of service quality

In the past few decades, researchers have introduced many models on service quality. The service quality model is, to elaborate factors affecting service quality, to highlight the issues regarding quality of services, to provide a solution to these issues, and to improve service quality.

2.7. Grönroos's model

Grönroos (1984) introduced the service quality model to understand customer ideology for service quality, i.e. what the customer demands in the name of service quality and the ways to improve it. This model assumes that perceived service quality is the result of consumer's comparison between expectations and perception. Moreover, Grönroos model also explained the evaluation process of service quality to be based on three dimensions: technical quality, functional quality, and image. The image dimension defines two concepts: what service firm provides to the customer, and how it provides this service.

2.8. SERVQUAL scale

Parasuraman, Zeithaml & Berry (1985) introduced the SERVQUAL scale based on gap model. This scale was designed to measure customer perception of service quality, and presented ten dimensions of service quality: loyalty, responsiveness, competence, access, courtesy, communication, credibility, security, understanding (knowing the customer), and tangibles. Through these dimensions, customer evaluates service quality. Ten dimensions of SERVQUAL were classified into two schools of thoughts: first one measures customer's expectation about the firm, while the second measures customer's perception about the service. He introduced various gaps between customer perception and perceived service quality.

Later, some researchers argued that these ten dimensions of SERVQUAL are overlapping and give the same meaning. So, Parasuraman, Berry & Zeithaml (1993) redesigned the SERVQUAL scale, and reset it into five dimension of service quality: loyalty, responsiveness, tangibles, assurance, and empathy. Fitzsimmons, & Fitzsimmons (2006) also support the scale represented by (Parasuraman *et al.,* 1985). Bateson, & Hoffman (2011) stated that as per SERVQUAL scale, the result from each dimension of consumers' expectation and consumers' perceptions are compared to evaluate the gap in scores between the two components; so that the firms' level of service quality can easily be defined. For instance: the higher the gap, the lower the service quality estimation; the lower the gap, the higher will be the service quality estimation.

2.9. SERVPERF scale

Cronin & Taylor (1992) were the first who highlighted the criticism on SERVQUAL scale. They argued that the SERVQUAL scale, on conceptual basis, was difficult and perplex for measuring service satisfaction. That's why they omitted the expectation (E) component of SERVQUAL and used only performance (P) component; though, dimensions of service quality are same for both SERVQUAL and SERVPERF scale. Cronin & Taylor (1992) established empirical evidence across four industries, namely: banks, pest control, dry cleaning, and fast food, to examine the validity of their "performance only" scale against SERVQUAL scale. In contrast to SERVQUAL scale, they obtained only perceived performance component and it was summarized on 22 items. The higher the perceived performance, the higher will be the service quality.

According to this scale, performance-based measure of service quality is more reliable and adequate to measure service quality. That's why, SERVPERF methodology is only based on performance based data. The major assumption of this scale is that the customers' expectation is not important. According to Cronin & Taylor (1992), SERVQUAL model is not suitable for measuring service quality. Parasuraman *et al.,* (1993) raised criticism in SERVPERF, but Cronin & Taylor (1992) reargued that performance based model is more adequate for measuring service quality. Later, Brady, Cronin & Brand (2002) confirmed their argument; they showed results of demanding meta-analysis study of 17 years, which established that both scales are valid. Moreover, many researchers discovered that SERVPERF scale is stronger and valid for measuring service quality than SERVQUAL scale. In addition, SERVQUAL scale requires some variations, while SERVPERF scale does not require any modification. On an overall, however, researchers approved both scales (SERVQUAL and SERVPERF) as valid, popular, and adequate for measuring service quality.

2.10. Model of perceived service quality and satisfaction

Spreng & Mackoy (1996) propose a model for a better understanding of perceived service quality and customer satisfaction. This model is based on the Oliver's (1993) model. The model educates the effect of expectations, perceived performance desires, desired congruency, and expectation disconfirmation, on overall service quality and customer satisfaction. Ten attributes can measure these effects, namely: convenience in making an appointment, friendliness of the staff, advisor listening to queries, advisor providing accurate information, the knowledge of the advisor whether the advice was consistent, advisor helping in long-range planning, advisor helping to choose the right courses for career, advisor interested in personal life, and the professionalism in office.
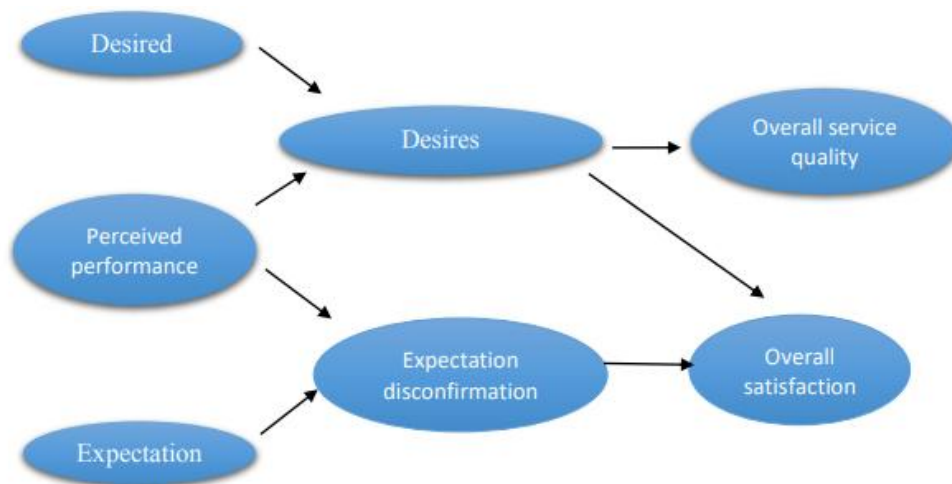

Figure 1. Perceived Service Quality and Satisfaction
Source: Spreng & Mackoy (1996).

3. Research methodology

This study is quantitative in nature. The quantitative nature of the study is accommodated through questionnaire and online survey.

3.1. Sample unit

To cover the entire Pakistani banking industry, four leading banks – HBL, NBP, MEEZAN and SCBPL were taken as a sample unit, and an account holder of each bank was treated as a respondent. These four banks have been selected to cover all sectors of Pakistani banking industry, namely: private, public, Islamic, and multinational sector; with the respondents chosen only from these four banks.

PRIVATE SECTOR	PUBLIC SECTOR	ISLAMIC SECTOR	MULTINATIONAL SECTOR
HBL	NBP	MEEZAN	STANDARD CHARTERED

3.2. Sources of data

Source of data is primary. Primary Data is begun by an analyst for the particular motivation behind tending to the current issue. In this study primary data is gathered through questionnaires.

3.3. Planning of data collection

Total 400 customers have been selected from Karachi. All districts of Karachi namely (Karachi central district, Karachi east district, Karachi west district, Karachi south district, Karachi Malir district and Karachi Korangi district) have chosen for reliability of data. 12-13 customers have been selected from each bank (HBL, NBP, MEEZAN and SCBPL) of each sector (Private Sector, Public Sector, Islamic Sector, and Multinational Sector). Banks were reached with structured questionnaire. Banking customers were given questionnaire while they were holding up in queue. A portion of the clients had filled the questionnaire after they had completed their banking transaction. This has enabled adequate time to the customers without meddling in their banking transaction. Requesting that customer finish a questionnaire in the bank gives them an opportunity to focus on measurements while responding the questionnaire; this likewise dispenses with issues with clients attempting to review their experience. A portion of the respondents were additionally reached through online system.

3.4. Data collection instrument and scaling technique:

In this investigation, the structured questionnaire concentrated on measuring service quality, customer satisfaction and customer loyalty. Questionnaire comprises of the three segments that measure service quality, consumer satisfaction and consumer loyalty separately. The questionnaire starts with getting the demographic information of the respondents and closes with getting rating of four selected banks.
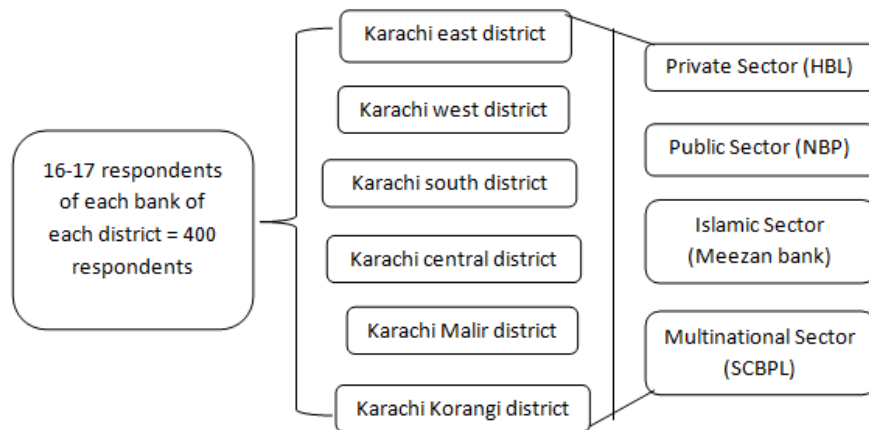

Figure 2. *Planning of Data Collection (Developed by Authors)*

The research has utilized 5 point Likert Scale for the investigation rather than 7 point Likert Scale because as indicated by Prayag (2007), 5 point scales decrease the level of disappointment among respondents, and expands the rate and quality of the responses. Moreover, it is simple to develop and standardize. In addition, respondents promptly see how to utilize scale and this scale is more appropriate for mail and individual meeting. Along these lines, every one of the announcements is created on 5 point Likert Scale in order to get typical spread of perceptions.

3.5. Questionnaire details

Questionnaire is adopted and formatted according to the study. As specify in the above table, study of different scientists were taken into the consideration to create questionnaire having 21, 13 and 6 items used for measuring service quality, customer satisfaction and customer loyalty respectively. Every item were assessed on 5 point Likert Scale running from 1 (= strongly disagree) to 5 (= strongly agree).

To explore the literature and variables of questionnaire, service quality is distinguished as independent variable whose effect is to be considered on two dependent variables customer satisfaction

3.6. Hypothesis of the study

The impact of service quality on customer satisfaction has been studied for this study. Tangibility, assurance, empathy, responsiveness, reliability, satisfaction and loyalty have been hypothesized.

3.7. First set of hypothesis

H_{1o}: Customers do not find the tangibles of the bank to be good.
H_{2o}: Customers do not perceive that the bank employees are reliable.
H_{3o}: Customers do not perceive that bank employees are responsive.
H_{4o}: Customers do not perceive that bank employees have empathy towards them.
H_{5o}: Customers do not perceive that bank employees are assuring towards them.
H_{6o}: Customers are not satisfied with the bank.
H_{7o}: Customers are not loyal toward the bank.
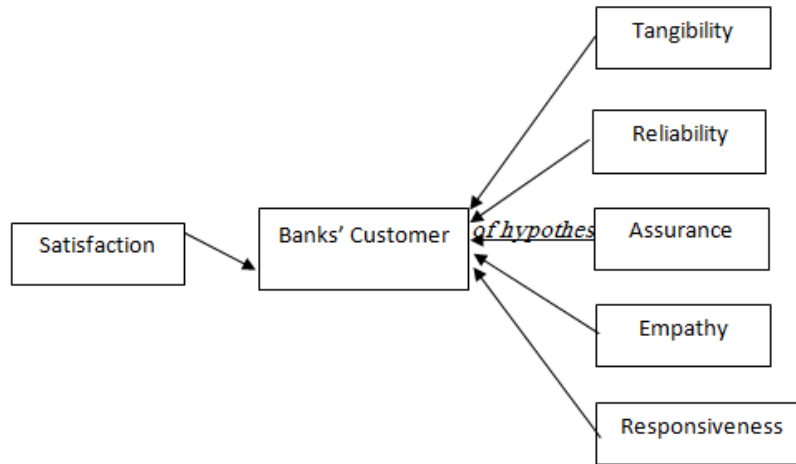
3.8. Second set of hypothesis

H_{o1}: Four of the banks do not differ in their level of tangible.
H_{o2}: Four of the banks do not differ in their level of reliability.
H_{o3}: Four of the banks do not differ in their level of responsiveness
H_{o4}: Four of the banks do not differ in their level of assurance
H_{o5}: Four of the banks do not differ in their level of empathy
H_{o6}: Four of the banks do not differ in their level of satisfaction.
H_{o7}: Four of the banks do not differ in their level of loyalty.

3.9. Data analysis technique

Questionnaire was designed to collect primary data. It has been analyzed through quantitative approach. In this study, the portion of data analysis is based on three stages. At first stage, the demographic data of respondents is analyzed through descriptive analysis. The second stage comprises the analysis of

respondents' perception regarding banks' service quality and satisfaction. To achieve this goal all the statements of service quality and customer satisfaction from have been analyzed in detail. At the third stage, inferential statistics has been used to draw inferences and make conclusion on the basis of sample. To achieve this goal Pearson correlation, regression, T-test, ANOVA has been applied on two set of hypothesis.

4. Data analysis and discussion of findings

This part represents numerical, tabular and graphical terms for the analysis of data collected through the questionnaire. The data for this study was acquired utilizing the SERVPERF questionnaire and analyzed using descriptive and inferential insights. SPSS version 23 was used to analyze the data. A p value ≤0.05 was considered as being statistically significant.

4.1. SERVPERF measurement instrument

SERVPERF model was used to conduct this study which only focuses on performance and eliminate the factor of perception. SERVPERF scale is based on five dimensions and 21 items. Other aspects of the study were also modified, namely: service quality and customer satisfaction. Moreover, to analyze the characteristic of sample six demographics questions were asked through survey questionnaire.

4.2. Descriptive statistics

Characteristics of the sample as well as responses to the study dimensions were described by using descriptive statistics including frequencies and percentage. The mean and standard deviations were used to depict the overall response and variation in the responses.

4.3. Demographic characteristics of the sample

The characteristics of the respondents including gender, age, qualifications, income, occupation, and district are considered in detail to disclose the attributes of the sample used in this study. Table 4.1 illustrates the overall picture of all the demographical aspects of respondents.

Table 4.1. *Demographics*

Demographics	Percentage					
Bank	Gender	Age	Education	Income	occupation	District
Valid percentage	36.0	25.3	18.8	46.8	16.8	16.8
	64.0	51.2	49.0	28.0	20.8	16.8
	100.00	15.5	32.3	17.3	34.0	16.5
		8.0	100.00	8.0	17.8	16.8
		100.0		100.00	6.5	16.8
					4.3	16.5
Total 400					100.0	100.0

Gender

The results as shown in Figure 4 depict that males comprised 64% (256) of the sample and females 36% (144). That is not an equal percentage of the gender groups due to male dominancy in society.
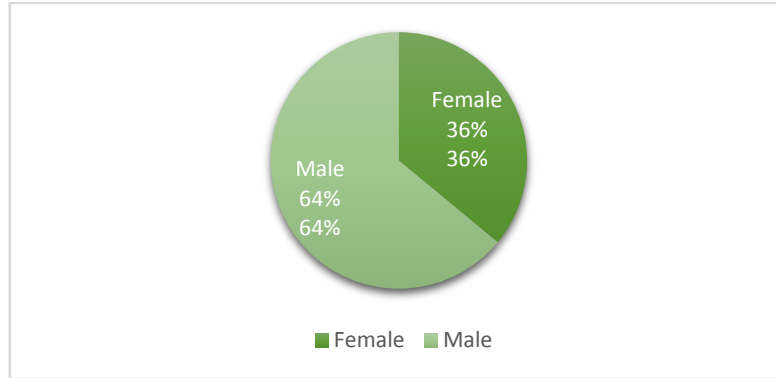
Figure 4. *Frequency distribution – Gender*

Age

Figure 5 reflects the age distribution of the respondents. In terms of age groups, 25.3% (101) of the respondents were between the age of 18 and 25, 51.2% (205) between the ages of 26 and 45, 15.5% (62) between the ages of 46 and 65, 8.0% (32) above the age of 60. Proportionally, results show that at least two thirds of the respondents patronizing the service were between the ages of 26 and 45.
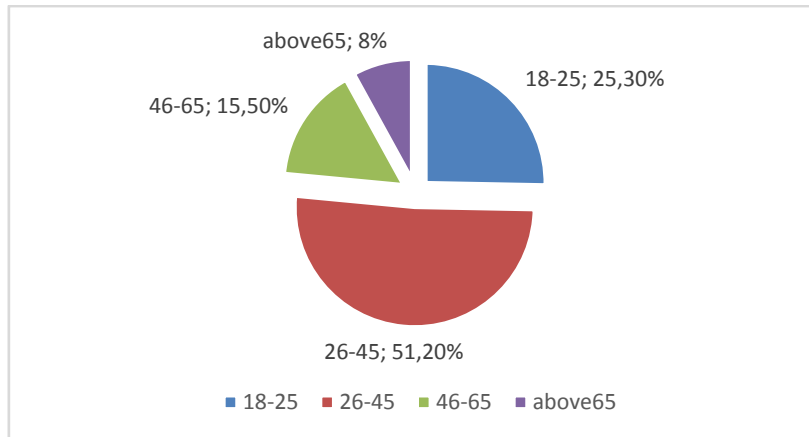

Figure 5. *Frequency distribution – Age*

Education qualification level

The result in Figure 6 depicts that 18.75% (75) of the respondents have a qualification below graduate, 49.0% (196) have a qualification of graduate and 32.25% (129) have a qualification of above graduate. Proportionally, One third of the respondents were graduate and post graduate. The majority of customers are knowledgeable and therefore they must be treated with care in terms of how marketing communication and promises are made.
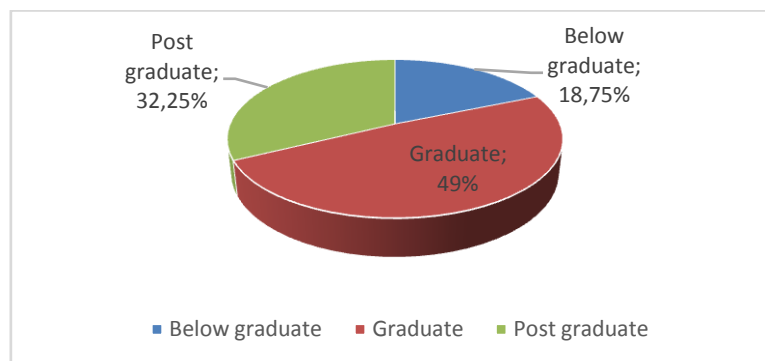

Figure 6. *Frequency distribution – Education qualification*

Income

As indicated in Figure 7, 46.8% (187) of the respondents were earning between 1000 and 50,000, 28.0% (81) had earning between 50,000 and 100,000, 17.3% (69) were earning between 100,000 and 500,000 and 8.0% (32) respondents were earning above 500,000. The majority of the respondents were earning between 1000 and 50,000.
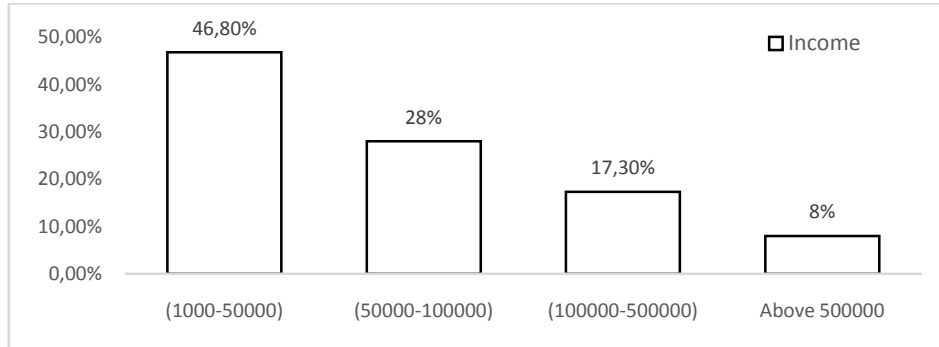

Figure 7. *Frequency distribution – Income*

Occupation

As indicated in Figure 8, 16.8% (67) of the respondents were students, 20.8 % (83) were employees of government and private services, 34.0% (136) were professionals, 17.8% (71) had their own business, 6.5% (26) of the respondents were house wife and 4.3% (17) of the respondents were retired. The majority of the respondents were employed.
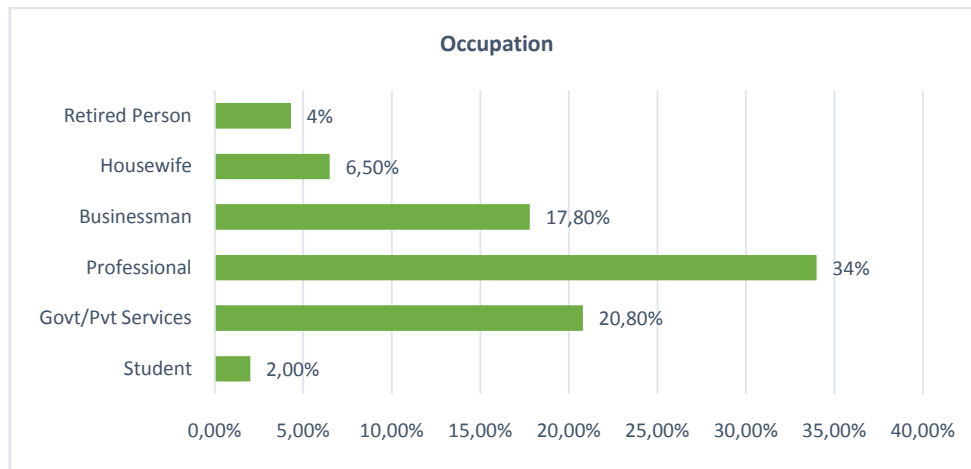

Figure 8. *Frequency distribution – Occupation*

District

As shown in table 4.2, 16.8% (67) of the respondents were from the Karachi central district, 16.8% (67) of the respondents were from Karachi east district, 16.5% (66) of the respondents were from Karachi west district, 16.8% (67) of the respondents were from Karachi south district, 16.8% (67) of the respondents were from Karachi Malir district and 16.5% (66) of the respondents were from Karachi Korangi district. Proportionally, there is almost equal distribution of district for data collection from Karachi.

Table 4.2. *Frequency distribution – District*

		District			
		Frequency	Percent	Valid percent	Cumulative percent
Valid	Karachi Central district	67	16.8	16.8	16.8
	Karachi East district	67	16.8	16.8	33.5
	Karachi west district	66	16.5	16.5	50.0
	Karachi South district	67	16.8	16.8	66.8
	Karachi Malir district	67	16.8	16.8	83.5
	Karachi Korangi district	66	16.5	16.5	100.0
Total		400	100.0	100.0	

Product of bank

Results in Figure 9 show that 70% (279) of the respondents use current account, 23% (93) of the respondents use saving account, 2% (7) of the respondents use bank for running finance purpose, 1% (5) of the respondents use for remittance purpose, 1% (3) of the respondents use bank for auto finance purpose, 1% (5) of the respondents use bank for personal loan purpose, 1% (6) of the respondents use bank for only utility purpose and 1% (2) of the respondents use bank for fixed deposit. The majority of the respondents are connected with the bank for current and saving account. They are not only the walking customer. That requires high quality of service.
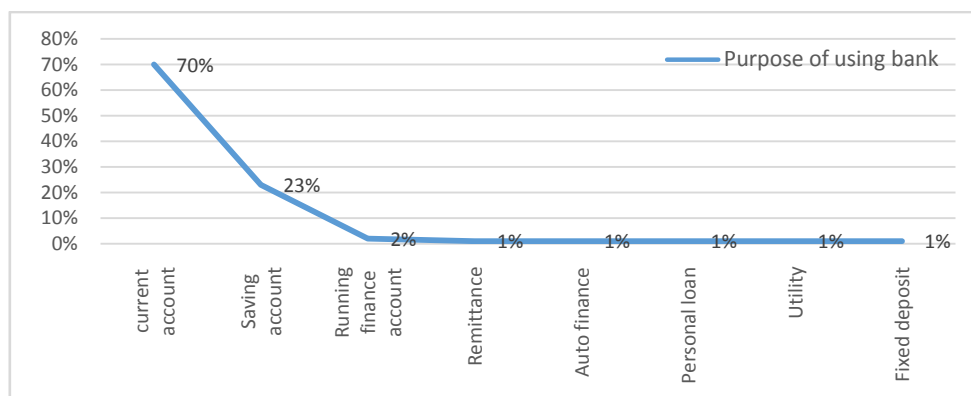

Figure 9. *Frequency distribution – product*

Use of bank services

The responses in figure 10 prove that 65%, 52%, 18%, 45%, 7%, 55%, 4% and 35% (352) of the respondents use bank for cash transaction, pay order, demand draft, debit card, credit card, SMS alert, RTGS and clearing service respectively. Findings prove that no any single product is fully utilized by the customers. This shows the gap of product knowledge and bank service. Moreover, some of the product utilization ratio is extremely low due to lack of knowledge namely RTGS, credit card and demand draft.
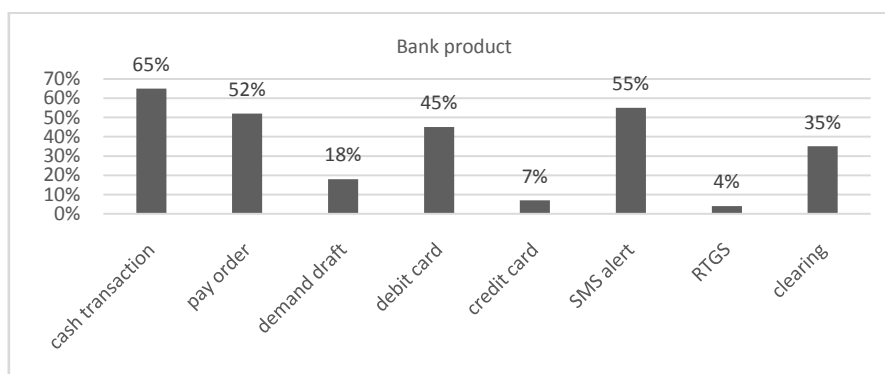

Figure 10. *Frequency distribution – cash transaction*

Goodness of the data

According to (Sekaran& Bougie, 2013) ''reliability scores less than 0.60 are considered poor, those in the 0.70 range acceptable, and those over 0.80 good''. The Goodness of the data was tested by determining the validity and reliability of the questionnaire. Validity of the questionnaire was established by using Factor analysis. Cronbach's Alpha was used to establish inter-item consistency and reliability. The Cronbach's Alpha coefficients as reflected in Table 4.3 that ranges from 0.830 to 0.953. The overall reliability score for the 40 items is 0.967 and this reflects a very high degree of inter-item consistency.

Table 4.3. *Reliability Statistics*

Cronbach's Alpha	
Dimensions	value
Tangibility	0.761
Reliability	0.723
Assurance	0.731
Responsiveness	0.785
Empathy	0.755
Overall	0.967

Principle Components Analysis

The results of the Kaiser-Meyer-Olkin Measure of sampling adequacy (KMO) and Bartlett's Test of Sphericity are shown in Table 4.4 The KMO was 0.957 and the level of significance for the Bartlett's Test of Sphericity was also 0.000 concluding that the sample was sufficient for the principal component analysis.

Table 4.4 . *KMO and Bartlett's Test*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.957
Bartlett's Test of Sphericity	Approx. Chi-Square	1.935.079
	df	780
	Sig.	.000

Table 4.5 shows the principal component analysis with a varimax rotation. It revealed five components (factors) with Eigen values greater than 1.00. Five factors were generated comprising tangibles with an explained variance of 20.421% and Eigen value of 8.168, reliability with an explained variance of 14.344% and Eigen value of 5.738, assurance with an explained variance of 7.982% and Eigen value of 3.193, empathy with an Eigen value of 3.104 and explained variance of 7.759% and responsiveness with an Eigen value of 2.766 and explained variance of 6.914%. Based on the results of the factor analysis, the questionnaire was valid with an explained cumulative total variance of 62.998%.This can be attributed to differences in opinion held by respondents.

Table 4.5. *Total Variance Explained*

Total Variance Explained			
Component	Rotation Sums of Squared loadings		
	Total	% of Variance	Cumulative%
Tangibles	8.168	20.421	20.421
Reliability	5.738	14.344	34.765
Assurance	3.193	7.982	42.747
Empathy	3.104	7.759	50.507
Responsiveness	2.766	6.914	57.420
5	2.231	5.578	62.998

First set of hypothesis test

The set of hypothesis, given earlier, are tested on the basis of the t–test analysis. The test allows determining the p-value. The decision criteria to accept or reject the null hypothesis: if the estimated p-value less than the 5% level of significance, the null hypothesis is rejected.

Tangibility testing

The Table 4.6, depicts the mean value of tangibility is 3.73. The estimated p-value for this mean at 5% significance level is (p=0.000) that provide the sufficient evidence to reject the null hypothesis i.e. H_o: Customers do not find the tangibles of the bank to be good and accepted alternate hypothesis i.e. H_{a1}: Customers find the tangibles of the bank to be good which implies the tangibles of the bank are significantly affected to the customers. Moreover, customers of the banks are satisfied with the physical facilities, dressing of employees and the materials were visually appealing.

Table 4.6. *Results of T-Test*

Variable	N	M	SD	T	DF	Sig. 1 tail	Results
TANGIBILITY	400	3.73	0.74	19.89	399	.000	$H_{a1=}$ Accepted
RELIABILITY	400	3.56	0.79	14.18	399	.000	$H_{a2=}$ Accepted
ASSURANCE	400	3.95	0.76	24.97	399	.000	$H_{a3=}$ Accepted
EMPATHY	400	3.74	0.87	16.84	399	.000	$H_{a4=}$ Accepted
RESPONSIVENESS	400	3.63	0.87	14.49	399	.000	$H_{a5=}$ Accepted
SATISFACTION	400	3.67	0.76	17.55	399	.000	$H_{a6=}$ Accepted
LOYALTY	400	3.74	0.88	16.83	399	.000	$H_{a7=}$ Accepted

Reliability testing

The Table 4.6, depicts the mean value of reliability is 3.56. The estimated p-value for this mean at 5% significance level is (p=0.000) that provide sufficient evidence to reject the null hypothesis i.e. H_o: Customers do not perceive that the bank employees are reliable i.e. and accept alternate hypothesis i.e. H_{a1}: Customers perceive that the bank employees are reliable which implies the reliability of the bank employees is significantly affecting the customers. Moreover, customers of the banks are satisfied with reliability of the employees of the banks.

Assurance testing

The Table 4.6, depicts the mean value of tangibility is 3.95. The estimated p-value for this mean at 5% significance level is (p=0.000) that provide the sufficient evidence to reject the null hypothesis i.e. H_o: Customers do not perceive that bank employees are assuring towards them and accept alternate hypothesis i.e. H_{a1}: Customers perceive that bank employees are assuring towards them which assurance the bank are significantly affected to the customers. The findings enlightened that the customers of the banks are satisfied and have confidence on banks employee regarding services. Bose & Gupta, 2013 stated that employee should develop the environment of trust this can create positive image of the bank.

Empathy testing

The Table 4.6, depicts the mean value of tangibility is 3.74. The estimated p-value for this mean at 5% significance level is (p=0.000) that provide the sufficient evidence to reject the null hypothesis i.e. H_o: Customers do not perceive that bank employees have empathy towards them and accepted alternate hypothesis i.e. H_{a1}: Customers perceive that bank employees have empathy towards them which implies the empathy of the bank employees is significantly affected to the customers. Moreover, customers of the banks are emotionally attached with the bank. Employees of the banks also provide personal attention to customers. Customers also rely and trust on bank services.

Responsiveness testing

The Table 4.6, depicts the mean value of responsiveness is 3.63. The estimated p-value for this mean at 5% significance level is (p=0.000) that provide the sufficient evidence to reject the null hypothesis i.e. H_o: Customers do not perceive that bank employees are responsive and accepted alternate hypothesis i.e. H_{a1}: Customers perceive that bank employees are responsive which that the responsiveness of the bank employees is significantly affected to the customers. Moreover, customers of the banks are satisfied with the responsive attitudes of the bank employees in term of giving special service, attention and understanding their specific needs. According to Dinh & Pickler (2012) study on service quality in

Vietnam banking sector highlighted the mean of all dimensions of service quality were satisfactory but particularly responsiveness dimension was ranked lowest mean score

Satisfaction testing

The Table 4.6, depicts the mean value of satisfaction is 3.67. The estimated p-value for this mean at 5% significance level is (p=0.000) that provide the sufficient evidence to reject the null hypothesis i.e. H_o: Customers are not satisfied with the bank and accepted alternate hypothesis i.e. H_{a1} Customers are satisfied with the bank which implies the satisfaction is significantly affected to the customers.

Customer satisfaction testing

As given in table 4.7 Standard Chartered Bank of Pakistan Limited has the highest mean value i.e. 3.80 for customer satisfaction followed by the Habib Bank Limited and Meezan bank Limited with the mean value 3.64 while the National bank of Pakistan has lowest mean value of customer satisfaction i.e. 3.58 the estimated p-value of one way ANOVA for customer satisfaction is 0.199 which is higher than the 5% level of significance indicate that there is an insignificant difference in mean values of customer satisfaction. So, the null hypothesis i.e. the banks don not differ in terms of customer satisfaction is accepted. One Way ANOVA concludes that the banks have insignificant difference in terms of customer satisfaction (Table 4.8).

Table 4.7. *One way ANOVA- tangibility*

TANGIBILITY						Results
Bank	N	M	SD	F	Sig.	$H_{b1=}$ Accepted
Meezan Bank Limited	100	3.6400	.79798	5.009	0.002	
National Bank of Pakistan	100	3.6100	.76403			
Standard Chartered Bank of Pakistan Limited	100	3.9700	.65836			
Habib Bank Limited	100	3.7100	.67112			

Table 4.8. *One way ANOVA- satisfaction*

SATISFACTION						Results
Bank	N	M	SD	F	Sig.	$H_{o=}$ Accepted
Meezan Bank Limited	100	3.64	0.75	1.556	0.199	
National Bank of Pakistan	100	3.58	0.75			
Standard Chartered Bank of Pakistan Limited	100	3.80	0.80			
Habib Bank Limited	100	3.64	0.70			

Regression model

Regression model is one of the most widely used and important statistical technique. With the help of regression model the effect of one or several variables on one variable can be measured.

Table 4.9 shows the results of first regression model which was developed to measure the customer satisfaction against the five dimensions of the service quality. The findings show that Tangibility, assurance and empathy are found significant to customer satisfaction while reliability and responsiveness are insignificant with R^2 value 61.7%. There is a need to develop a restricted model with significant variables.

Table 4.9. *Regression Model- Customer Satisfaction*

Variables	B	S.E	T	Sig.
(Constant)	.404	.143	2.833	.005
TANGIBILITY (T)	.307	.052	5.913	.000
RELIABILITY (R)	.047	.040	1.163	.246
ASSURANCE (A)	.213	.045	4.695	.000
EMPATHY (E)	.223	.046	4.814	.000
RESPONSIVENESS (Re)	.075	.051	1.467	.143
R^2	0.617			
F(sig.)	126.866 (.000)			
Dependent Variables	Customer Satisfaction			

$$\text{Customer Satisfaction} = .404 + .307T + .047R + .213A + .223E + .075Re \qquad (1)$$

Table 4.10 represent that the restricted regression model after dropping the two insignificant variables (Reliability and Responsiveness). It is concluded that tangibility, assurance and empathy are found to be significant dimensions that have impact on customer satisfaction. The final restricted model for satisfaction is shown in equation 2.

Table 4.10. *Restricted Regression model- Customer Satisfaction*

Variables	B	S.E	T	Sig.
(Constant)	.422	.137	3.071	.002
TANGIBILITY	.349	.048	7.290	.000
ASSURANCE	.243	.043	5.629	.000
EMPATHY	.262	.043	6.157	.000
R^2	0.617			
F(sig.)	126.866 (.000)			
Dependent Variables	Customer Satisfaction			

$$\text{Customer Satisfaction} = .422 + .349T + .343A + .262E \qquad (2)$$

5. Conclusions and recommendations

The central idea of this study was to identify the service quality in banking industry of Karachi. This study highlighted the customer perception in the light of five dimensions of service quality and customer satisfaction. This study focused on customer perception regarding these aspects in banking sector of Karachi. The core purpose of the study was to identify the significant parameters of the service quality and measure the relationship of these with customer satisfaction, while finally developing an empirical model. A modified SERVPERF scale was used with 21 items of service quality and 13 items of customer satisfaction.

- The finding of the study suggest that that dimensions of service quality have direct and positive relationship with customer satisfaction. For customer satisfaction, it was found that tangibility, assurance and empathy having positive and significant impact.

- The study suggests that customer satisfaction is significant variable for banking industry. Loyal customer are life line of the banking sector and always provide fresh blood to the industry.

Three main set of hypotheses with two sub hypothesis was designed and tested. The portion of secondary data of this study presented the global perspective of previous research regarding service quality in banking sector. Furthermore, different models of service quality and its dimensions were acknowledged. This study highlighted the basic model of service quality i.e. SERVPERF. The literature review of this study highlighted the relationship between service quality and customer satisfaction. The need of service quality was emphasized. Although service quality gap is inevitable but there is also a path of service recovery techniques. The results of the study suggest customer satisfaction based on service quality dimensions such as tangibility, empathy and assurance having positive and significant relationship. It was found that reliability and responsiveness do not have significant impact on customer satisfaction.

Based on the findings of this study, the following recommendations are presented for consideration.

1. To improve level of satisfaction banks should focus on tangibility, empathy and assurance whereas level of responsiveness and reliability need to be maintained.

2. To enhance the long term relationship with the customer it is important for the banks to focus on assurance, responsiveness, tangibility and empathy, additionally banks need to sustain the reliability.

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