

*Full Length Research Paper*

# **A mediation of customer satisfaction relationship between service quality and repurchase intentions for the telecom sector in Pakistan: A case study of university students**

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**Organizations always look forward to long lasting success. For long lasting benefits and greater returns, organizations continuously try to satisfy their customers in order to retain them and get their future repurchase intentions. Future repurchase intentions of customers are outcomes of various organizational efforts. As such, one of the most important determinants of customer repurchase intentions discussed by researchers is offering, competitively, the best service quality to customers. All organizations offer the best possible service to their customers in order to retain them and create positive repurchase intentions in the future. This study aims to study the impact of service quality on customer repurchase intentions. Satisfaction is a variable which is an outcome of better service quality, and in return, it gives customers the zeal to stay with the service provider and creates greater repurchase intentions for the customers. So, satisfaction is considered as a mediating variable in the study. The study is conducted in the telecom sector (only cellular companies) of Pakistan. Service quality is measured using Parasuraman et al. (1988) SERVQUAL model containing 5 dimensions of service quality (tangibles, responsiveness, empathy, assurance and reliability). Nonetheless, the relationship of service quality with customer repurchase intentions is also studied. The data were collected from 331 young mobile users, and as such, correlation and regression analysis were used to analyze the data. However, results and discussion are presented.**

**Key words:** Service quality, mediating variable, satisfaction, customer repurchase intentions, telecom sector, cellular companies.

## **INTRODUCTION**

Organizations always look forward to long lasting success. In order to be successful in the long run, they need to keep abreast with all of their stakeholders. Out of the stakeholders, customers are considered to be the most important one. Future repurchase intentions of customers are outcomes of various organizational efforts. One of the most important determinants of customer repurchase intentions discussed by researchers is offering, competitively, the best service quality to customers.

All organizations offer the best possible service to their

customers in order to retain them and create positive repurchase intentions in the future. Offering quality products and services is said to be the key factor in satisfying customers and it has a positive effect on the repurchase intentions of customers in the future. As this study is restricted to the service sector, the quality dimensions of the service sector are considered and as this research is restricted to the service sector and further to the cellular industry, only those variables that proved to be the dimensions of the service quality are taken. The Service Quality Model (SERVQUAL), given by Parasurman et al. (1988), was used for the study. As such, this model contains five service quality dimensions (tangibles, responsiveness, empathy, assurance and reliability).

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Studies suggest that there is a positive relationship between service quality and the satisfaction of customers (Ahmed et al., 2010). Findings also suggest that there is a positive relationship between service quality retention and future intention of customers (Ahmad et al., 2010). All the firms that want to create and maintain competitive advantage against rivals should offer superior services to their customers. Simply, we can say that companies must pay great attention towards investing considerable amount and time on provision of better quality services to their customers in order to survive and compete in the long run (Sattari et al., 2010). Henkel et al. (2006) have discussed in their findings that satisfied customers in the telecom sector have high future intentions to stay with the company and future repurchase intentions.

Out of the various services offered by the cellular companies, SMS (short messaging service) is considered to be one of the most widely used services. Researchers, through out the world, have studied service quality in various dimensions. Thus, there are numerous studies conducted on customer satisfaction in various parts of the world. SERVQUAL, satisfaction and repurchase intentions have been discussed by various researchers, but very few studies are available with respect to the telecom sector of Pakistan. Out of the sectors of the economy, the Pakistani telecom sector has witnessed the most rapid growth in recent years, but very few researchers have given a research look at this sector of the economy. Now, this study is aimed at investigating the relationship between service quality and customer repurchase intentions, and an attempt has been made to cover the vacuum that has been created due to lack of research in this regard. As customer satisfaction also leads to customer repurchase intentions, satisfaction can mediate a relationship between service quality and future repurchase intentions of students. This study investigates the relationship between service quality and customer repurchase intentions mediated with a satisfaction of the Service Quality (SERVQUAL) model given by Parasuraman et al. (1988) which was used for the study.

## LITERATURE REVIEW

Service quality is regarded as the impression customers give to the superiority and inferiority of the service provider (Tsoukatos and Rand, 2006). Chau and Kao (2009) suggest that service quality and its dimensions have a direct bearing on customers' evaluation of a company and the intentions to choose the service provider. Kandampully (1998) states that the firms with loyalty to offer services to their customers yield returns in the shape of satisfied customers who are willing to stay with the organization. Turel et al. (2007) found that customers' adoption decision of the service provider depends on the quality offered and the price of the service provided.

Chau and Kao (2009) found that all elements of service quality directly influence satisfaction of customers and

value the service offers to them. Cavana et al. (2007) reported that service quality dimensions (tangibles, responsiveness, empathy, assurance and reliability) should be considered in order to see its impact on customers of the service provider.

Out of the outcomes that better service offers, customers' satisfaction is said to be the pioneer one. Customer satisfaction is now considered as the corporate level strategy (Rust and Zahorik, 1993). Drucker (1973) sees customer satisfaction as the base and source of success for an organization. As such, customer satisfaction is a base of relation between marketing and management departments (Claycomb and Martin, 2002), and a source of competitive edge (Anderson et al., 1994). Customer satisfaction is also important for organizations as it has a positive impact on the overall financial performance of organizations (Anderson et al., 1994; Rust and Zahorik, 1993). Henkel et al. (2006) found that those customers who are satisfied with the service provided by the telecom company intended to increase their usage and intentions to purchase in the future. Cronin et al. (2000) concluded that the quality of service offered, the service itself and the overall satisfaction with the provided service had a direct bearing on the intentions of customers to continue with the current service provider in the future.

There are a number of researches available that have discussed the importance of retention of customers for the current and future success of businesses. Retaining customers with repurchase intentions is said to be one of the most important segment of business considered for the success of organizations. Reichheld and Sasser (1990) have discussed that customer retention reduces costs and can be a source of the increased market share of business. In the words of Atalik and Arslan (2009), offering quality service and value to customers creates loyalty in customers. Steenkamp (1989) concluded that offering quality service is a main source of customer retention which leads to increased market share. Similarly, Fornell (1992) had also discovered that in order to retain customers, companies should offer such service that increased satisfaction of customers. Same findings were given by Ahmad et al. (2010) that provision of better quality services increased the retention intentions of customers.

Parasuraman et al. (1988) has discussed that there are five dimensions of service quality (tangibles, empathy, reliability, assurance and responsiveness), while Cavana et al. (2007) says that the dimensions of service quality include assurance, empathy, reliability, convenience and responsiveness. Various researchers have given different reports regarding the relationship between dimensions of service quality and customers satisfaction. Kim et al. (2004) discovered that core quality, value added services and customer support had a definite impact on the level of satisfaction of customers in cellular service companies which finally brings loyal customers to the company. Findings given by Cavana et al. (2007) suggest that

convenience and reliability do not have any significant relationship with customer satisfaction, while assurance, empathy and responsiveness have a strong relationship with the satisfaction level of customers. Cronin and Taylor (1992) have discussed customer satisfaction as a function of service quality offered to customers. Lai (2004) found a significantly positive relationship between satisfaction of customers and service quality dimensions of tangibles, empathy and assurance. Some findings have been proven by the works of Cronin and Taylor (1992). Findings of Ahmed et al. (2010) suggest that there is no significant relationship with empathy and customer satisfaction, but service quality dimensions of assurance, reliability, tangibles and responsiveness have a positively significant relationship with satisfaction. Baumann et al. (2006), in his research, concluded that the effectiveness of the service provider's attitude and empathy of staff leads to higher degree of customer satisfaction, and in return, customers recommend others to use this service. He further concludes that effective attitude and empathy have a long term impact on customer satisfaction and future repurchase intentions, while empathy has a short term relationship with satisfaction and repurchase intentions.

Deng et al (n.d.) found that provision of better service quality is one of the most crucial factors for satisfaction of customers and it increases the loyalty and repurchase intentions of customers. Providing efficient service to customers increases customer loyalty (Kandampully, 1998). Loyal customers in return are found to have a great intention of being customers of the company in future, willing to spend more amounts on purchase and would recommend others to be customers of their service provider (Keiningham et al., 2007). Same findings were given by Chen (2008), who concluded that provision of better services and satisfaction of customers with the services increased future usage intentions of customers. Customer loyalty is dependent on the quality of service offered (Cöner and Güngör, 2002). Findings given by Lai (2004) showed that there is a significantly positive relationship between the quality of service offered and customer satisfaction, as well as with future purchase intentions of customers. Loyal customers of an organization are more interested to be customers of the same service provider in the future and as such, recommend others to use the same service in the future (Barnes, 1997). Brown and Gulycz (2001) consider the satisfaction of customers as an important tool to retain customers in the future and with positive repurchase intentions.

On the basis of the given literature, we can formulate the following research model and research hypothesis.

## Theoretical framework

### Hypotheses

H<sub>1</sub>: There is a significant relationship between service

quality and customer repurchase intentions.

H<sub>2</sub>: Customer satisfaction mediates a relationship between service quality and customers repurchase intentions.

## RESEARCH METHODOLOGY

### Sample and sampling technique

The population of the research consists of young university students. The reason behind the selection of university graduate students is that these students are the target market of the telecom sector and are more vigilant towards the changes in the telecom sector (Alam, 2009). As a matter of fact, youths are more attracted to promotional and advertisement activities of these companies (Alam and Khalifa, 2009). However, multistage sampling technique was used to obtain the data. There are 25 universities in Lahore. Out of these universities, 19 are private and 6 are public sector universities. In the first stage, 5 public and 5 private sector universities were selected, on the basis of simple random sampling, from the provincial capital, Lahore, which is the biggest province of Pakistan (Punjab). In the next stage, stratified sampling was used to select students from all these universities. A total of 400 questionnaires were distributed among the students of the selected universities and 361 were received back with a response rate of 90%. The respondents included male (57%) and female (53%) with an average age of 23.4 years.

### Instrument and measurement

In order to operationalize the dimensions of service quality, customer satisfaction instrument was adopted from Lai (2004). The questionnaire included five distinct dimensions that predict the service quality. These dimensions are tangibles, assurance, empathy, reliability and responsiveness.

### Data analyses

The data collected from the sample was analyzed using Microsoft Excel 2007 and SPSS 16.0. Sobel test of mediation testing was used to judge mediation effects of satisfaction on the relationship between Service Quality (SERVQUAL) and customer repurchase intentions. Mediation test technique was developed using Baron and Kenny (1986). This technique is a widely accepted technique for testing. Its universal application has made it a valuable and authentic tool to assess mediation effects in variable testing. Findings of the study are thus discussed.

## FINDINGS

Table 1 shows findings of Pearson correlation. The table contains descriptive values, correlation values and level of significance. Mean scores of all the variables suggest that the users were slightly satisfied with most of the dimensions of service quality, satisfaction and retention (SERVQUAL, tangibles, assurance, responsiveness, reliability, satisfaction and repurchase intentions), but users were not satisfied with empathy. P values show significant and positive relations between all variables of service quality, satisfaction and repurchase intentions,

**Table 1.** Pearson correlation.

Variable	Descriptive		Satisfaction		Retention	
	Mean	S.D.	R value	P value	R value	P value
SERVQUAL	4.8208	0.71827	0.538	0.000	0.394	0.000
Tangibles	5.4003	1.1543	0.183	0.001	0.190	0.000
Empathy	3.3595	1.5152	-0.236	0.000	-0.248	0.000
Assurance	4.8520	1.2006	0.425	0.000	0.359	0.000
Responsiveness	5.0725	1.1399	0.521	0.000	0.381	0.000
Reliability	4.8741	1.0582	0.435	0.000	0.297	0.000
Satisfaction	5.2598	1.4424	0.580	0.000	---	---
Repurchase Intentions	5.3369	1.2800	---	---	---	---

Correlation is significant at the 0.01 level.

**Table 2.** Regression analysis results.

Regression analysis result	Value
Regression coefficient for the association between SERVQUAL and repurchase intentions	0.709
Standard error of c'	0.90285
P value of c	0.000000
Regression coefficient for the association between SERVQUAL and satisfaction	0.9804
Standard error of a (S <sub>a</sub> )	0.093332
P value of a	0.000000
Regression coefficient for the association between satisfaction and SERVQUAL on repurchase intention	0.4591
Standard error of b (S <sub>b</sub> )	0.047015
P value of b	0.000000

Significant at the 0.01 level.

except empathy that shows significant but negative relations with satisfaction and repurchase intentions. There is also a positive relationship between satisfaction and repurchase intentions of customers.

Findings of Table 2 show the regression analysis results of the independent variable (SERVQUAL), the mediating variable (satisfaction) and the dependent variable (repurchase intentions).

Findings show regression coefficients (*r*), standard error of the relationship and the significance of the relationship (*p* value) between variables. It also depicts that there is a significant relationship between service quality (SERVQUAL) and repurchase intentions ( $p = 0.000 < 0.01$ ). Considering the relation between the independent variable (SERVQUAL) and the moderating variable (satisfaction), a strong relation was found between both variables ( $p = 0.000 < 0.01$ ), and as such, a relation between the moderating variable (satisfaction) and dependent variable (repurchase intention) was highly significant ( $p = 0.000 < 0.01$ ).  $R^2$  (regression co-efficient) of all the relations shows an amount of change in the dependent variable that may be attributed to the independent variable. All the values of regression coefficient show a higher rate of change due to the predictor variable ( $R^2 = 0.709$  and  $0.9804$ ), except *b* (satisfaction on

repurchase intentions) which shows a moderate effect of the predictor variable ( $r^2 = 0.4591$ ).

Sobel test of mediation testing is used to judge mediation effects of satisfaction on the relationship between service quality (SERVQUAL) and customer repurchase intentions. Findings suggest that satisfaction strongly mediates a relationship between service quality (SERVQUAL) and customer repurchase intentions. Table 3 shows that the relationship value is also significant ( $p = 0.000 < 0.01$ ). Similarly, Goodman test also shows that satisfaction strongly mediates a relationship between satisfaction and customer repurchase intention.

Table 4 shows the strength of mediation effect due to the mediating variable. About 70.56% of the independent variable's effect on the dependent variable is caused by mediation. The ratio of indirect to the direct effect also shows that the effect of the independent variable on the dependent variable, through the mediating variable, is much higher than the direct effect on the dependent variable.

## DISCUSSION AND CONCLUSION

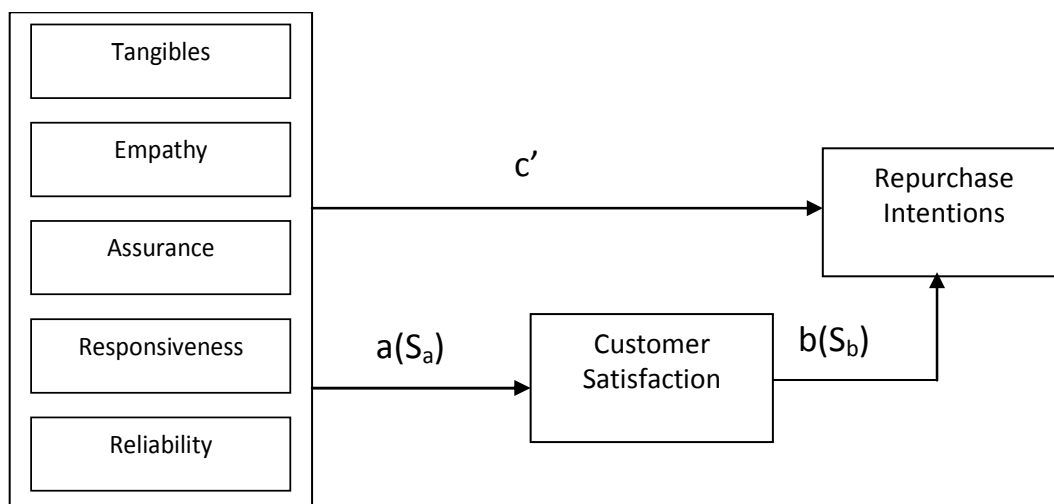
Findings of the study show that customers are somewhat/

**Table 3.** Mediation analysis results.

Mediation analysis result	Value
Sobel	7.463707
P value	0.000000
Percentage of the total effect that is mediated	70.563796
Ratio of the indirect to direct effect	2.397177
Goodman test	7.447488
P value	0.000000
Goodman II test	7.480032
P value	0.000000

**Table 4.** Percent mediated.

Percent mediated	Value
Percentage of the total effect that is mediated	70.563796
Ratio of the indirect to direct effect	2.397177



**Figure 1.** Proposed model of the customer satisfaction mediation of repurchase intentions.

slightly satisfied with the satisfaction and intending repurchase intention. All the dimensions of service quality are having significant relations with satisfaction, but surprisingly empathy was found to have a significant but negative relationship with satisfaction and repurchase intentions. This might be due to the cultural values in the society where there is high power distance (Alam et al., 2010). These findings are consistent with the findings of Ahmed et al. (2010a; b). Their findings also prove that empathy is significantly, but not positively related with the satisfaction and retention intentions of customers in the telecom sector. Findings of mediation relation also show the effect of satisfaction between service quality and customers' repurchase intention. Here, satisfaction strongly predicts the importance of SERVQUAL for

repurchase intentions of students. Provision of better service first satisfies customers and then it makes them repurchase in the future. These findings prove the findings given by Brown and Gulycz (2001) and Chen (2008), who recommended that satisfied customers are more inclined towards retaining a relation with existing companies and positive repurchase intentions in the future. So, we can say that satisfaction affects the relationship between provisions of service and repurchase intentions. These findings prove that the pro-posed model for customer repurchase intentions shown in Figure 1 is an adoptable model, and as such, customer satisfaction mediates a relationship between customer repurchase intentions and service quality. If companies want to retain their customers and their future positive repurchase

repurchase intentions, they have to satisfy their customers at first preference. This, in return, will make their customers to be satisfied and they would be willing to continue their purchase in the future. This research provides a good insight for telecom companies and how they can retain their customers and motivate them to repurchase them in future. This study covers only the telecom sector, while other service sectors can be assessed with regard to the provision of services and outcomes they reap in return.

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