Mediating Role of Customer Satisfaction in Determining Service Quality and Moderating Role of Switching Barriers on Customer Loyalty

by

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I want to dedicate this achievement my parents, teachers and friends who always encourage and support me in every crucial time

CERTIFICATE OF APPROVAL

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Mumtaz Hussain

Abstract

The purpose of the study is to examine the mediating role of customer satisfaction in determining service quality and moderating role of switching barriers on customer loyalty. This research has explored the mediating effect of customer satisfaction between the service quality dimensions and customer loyalty and also examines the moderating effect of switching barrier between the customer satisfaction and customer loyalty as mediated moderation. Data was collected from the mobile phone users and services providers from Islamabad and Rawalpindi region. The present study is descriptive and deductive in nature which describes the relationship of the research variables. Population of the current study was the major mobile service providers and their users. Realiable data of 261 respondents was collected by online survey approach with google.doc. The findings of the study examined that customer satisfaction has positive significant impact on customer loyalty, while service quality significant impact on customer satisfaction. The service quality insignificantly influence the customer loyalty. Therefore, customer satisfaction has significantly positively mediates the relation between service quality and customer loyalty, whereas the moderating effect of switching barrier is significantly positively linked with customer loyalty which implies that there is switching barrier moderation effect existed between the customer satisfaction and customer loyalty. Mobile phone service providers can adopt the policies for improvement in services in which they reduce the customer switching barrier Finding of this study has importance for country economy, because mobile phone users contributed the huge part of revenue.

Keywords: Service Quality, Customer Satisfaction, Switching Barrier, Customer Loyalty, Mobile Phone Industry.

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Abbreviations

CL	Customer Loyalty
CS	Customer Satisfaction
LLCI	Upper Limit Confidence Interval
SB	Switching Barrier
SQ	Service Quality
ULCI	Upper Limit Confidence Interval

Chapter 1

Introduction

Customer loyalty has been generally related to organizational financial performance in detail, (Reichheld & Sasser, 1990) because it performs a vital role in sustaining and growing sales (Huretal 2010). Furthermore significantly, loyalty examines customer desirability and profits improvement from the cost of influencing new consumers is at least five times higher than the cost of maintaining the engaged clients (Edward & Sahadev, 2011; Reichheld & Schefter, 2000).

In mature markets with recognized participants, it is far better to focus customer turnover further than share-building approaches because the net return on investments could be much higher for retaining techniques than for customer attraction approaches (Zeithaml, Berry, & Parasuraman, 1996). However, examining the elements of loyalty particularly in a highly competitive market like the telecommunication sector is a stimulating theme for further study.

Service quality is generally viewed as the output of the service delivery system, especially in the case of pure service systems. Service quality today has become not only important for many businesses' initiative in which significant concept of the service industry. It is effectively impossible for any business organization to continue without making customer satisfaction.

This investigation has shown repeatedly that service quality affects the company findings likewise working dominance (Portela & Thanassoulis, 2005), growing sales revenue (Kish, 2000; Moe et al., 2002) and proportion of market (Fisher, 2001),

maintaining consumer connections, develop larger picture and encourage consumer commitment (Ehigie, 2006; Newman, 2001).

The telecom sector one of a growing industry in the whole world and especially in emerging countries that try to make contact with another country for their best communication facilities. These strategic decisions of management in firms should create safety about using the appropriate method and strategies for delivering quality services to their consumers (Budur, Abdullah Rashid, & Poturak, 2018). Also, one of the basic objectives of marketing industry expansion firms is offering internal and external effectiveness opportunities to their companies to extend the competitive advantage in the market scenario (Torlak, Demir, & Budur, 2019).

Pakistan is a developing mobile usage economy with digital types of machinery starting from the transformation of sources in which people live and work easily. Therefore, with the pace of the growing level of customers and clients, the digital information system has become an important channel for accessing public and private services. Mobile is the major source of Pakistan's industrial advancement and the wider evolution to a knowledge base economical way in which determinants for openness to trade, a fair tax regime and a supportive business environment.

In our country, the mobile phone industry is important concerning digital connectivity among people. Almost 89 million unique subscribers were recorded at the end of 2019. Therefore, 67% of individuals who have accessed the internet have only ever done with the usage of mobile devices (GSMA Survey 2019. Pakistan shows that a relatively huge user gap which is 54% of the total population is covered by 3G/4G internet services but these people don't subscribe to the internet any time.

Therefore, to access the connectivity and affordable mobile devices are out of purchasing capacity of people so both these factors vary behind. Hence, to increase the availability of contents in their local language, so that ensure the privacy and security barrier for individual, addressing the gender imbalance problems and improving the digital literacy rates are also be critical for minimizing the present difference and rushing the digital economy (Region in Focus: Asia Pacific, Q2 2019). Pakistan recorded an average annual GDP growth rate of more than 5%

between 2014 and 2018. The public administration of our country is targeting for average growth of 5.4% over the 2018–2023 period. To target 2023, the economic involvement of the mobile industry in Pakistan will reach $24 billion, accounting for 6.6% of GDP. The mobile phone environment in our country, directly and indirectly, employed 450,000 people in 2018 and Pakistan subsidized $2.2 billion as public sector revenue in the national economy.

There is greater scope for developing projects related to the growth of services in developing countries such as Pakistan. Currently, the main projects in the field of telecommunications are 5G projects. Zong and Mobilink recently successfully tested 5G services in Pakistan. In this scenario, if service providers do not make efforts to distinguish them from competitors, consumers are more likely to switch to other competitors with almost zero cost. To obtain information on the previous 4G projects of these companies, a research project is needed and services are procedures and actions (Zeithaml, Bitner, & Gremler, 2018).

Generally speaking, "services are monetary actions that produce worth and deliver assistance to the consumer at certain times and in many spots as an effect of the required modification or the name of the user of services (Lovelock, 1983). The achievement of mobile facility networks is based on strong relationships with consumers (Gimpel, Huber, & Sarikaya, 2016), which explore customer satisfaction and loyalty (Lymperopoulos, Chaniotakis, & Soureli, 2006). In terms of service marketing, quality of service is paramount (Kushwah & Bhargav, 2014). Strong competition in the marketplace is now essential to building long-term relationships, and therefore customer loyalty is an ever-growing problem. Pakistan's telecommunications industry has undergone changes in the last decade.

This need was felt by a large number of market participants in Pakistan. This fierce competition forced the service provider to compete in the market and differentiate it based on factors rather than price. Thus, it was this concept of quality of service that arose and attracted attention. The best quality of service gives your organization a competitive advantage. Any service organization can discriminate, providing quality services. Nowadays we are living in a technologically oriented world with a rapid development phase. Currently, the world is shown as a global

village (Aslam, Ham, & Arif, 2017; Friedrich, Gröne, Hölbling, & Peterson, 2009) hence every individual need to connect with another person (Hudson, Huang, Roth, & Madden, 2016). Technological advances have altered the way we use anything in daily life, disseminate and create information (Aslam, Batool, & Haq, 2016; Schuster, Lund-Thomsen, Kazmi, Sharma, & Singh, 2016).

As with developing nations, Pakistan has found itself in a fast-paced technology race and given the developing market for mobile phone penetration (Qayyum, Khang, & Krairit, 2013). Pakistan's telecommunications sector has become a key factor in economic growth (Jahanzeb, Fatima, & Khan, 2011), from late 2015-2016. It introduced a revenue of 454.4 billion PKR. It also accounted for 26% of the country's total revenue, as shown in the Pakistan Telecommunications Authority's (PTA) annual report for 2016. According to (Shujaat, Syed, & Ahmed, 2015), telecommunications is a highly managed sector, with increasing rapid progress to keep pace with global market initiatives. Economic Information Report 2009, Pakistan ranks fifth in terms of development and expansion of the world cellular market.

Pakistan's mobile market is one of the fastest-growing markets with higher growth rates than other sectors of the country (J. F. Ali et al., 2010). According to the PTA annual report for 2016, cellular density in Pakistan increased from 60.72% to 69.12%, with 133.24 million mobile cellular subscribers in the country overall. Besides, mobile broadband penetration (3G & 4G) has enlarged to 15.32%, with 3G and 4G subscribers reaching 29.53 million. Pakistan having six major cellular service providers Mobilink, Warid, Ufone, Telenor, Zong and (S.COM) challenging forcefully for a bigger market share and more revenue.

1.1 Background of the Study

The achievement of each business organization's major focus on customer satisfaction. Whenever a business is about to start, clients always set on first then after that company focus on making the profit. Those companies that succeed in fully satisfying customers are remain in the leading market positions. Today's business

organizations known that customer satisfaction is a basic segment of any business achievement, during this activity everyone playing a dynamic role in increasing market value. Customers are normally considering the people who are buying the goods and services from the market or from their business unit that fulfill their needs and wants. Customers buy products to meet their monetary expectations.

The digital age has created a huge base of services related to the telecommunications industry, such as call applications, messaging and the Internet, which requires a telecommunications connection. The number of telecommunication service consumers in Pakistan has grown in the last few years, and the expansion of the telecommunications industry has created great competition (Imtiaz et al., 2015). Pakistan's telecommunications sector also grew up mostly due to trading and advancement in investing liberalization, favorable policies and healthy rivalry (Imtiaz et al., 2015). Leading the market, service providers sell their services at a low price, broaden their coverage areas, invest in customer service and tailor their services to customers' needs. This competition has improved the quality of services from telecommunications service providers, so that customer satisfaction achieved can retain customers. The quantity and quality of services offered by telecom service providers to subscribers in Pakistan have increased. For service providers, customer satisfaction is a top priority for telecommunications operators. Also, if customers are satisfied, they are loyal to service providers (Njei, 2018). However, many other scenarios, such as 4G Internet at 2G or 3G speeds, call interruptions, busy networks and many other quality problems, should be considered in terms of their impact on customers and their sense of satisfaction and devotion. This study is needed to evaluate customer satisfaction and loyalty to the current service provider in their latest 4G projects.

1.2   Gap of Study

While the number of mobile subscribers is growing rapidly, the pace of attracting new customers is slowing as the market develops. Given the current competitive market, as the mobile market is maturing, customer retention is a critical problem

for the achievement of the mobile telecommunications business. The task of recalling prevailing consumers are to be higher, and mobile number portability have a significant impact on changing customer behavior. There is basic tasks of mobile operators over the coming period is how to retain their customers.

Kim et al (2004) studied project satisfaction, and major factors that determine customer satisfaction are their understanding of the quality of services. Shafei and Tabaa (2016) discussed the influence of network service provider on customer loyalty with an intermediary role in customer satisfaction. Several investigations have described the moderating effect of useful features on the linkage among customer satisfaction and customer loyalty (Karjaluoto, Jayawardhena, Leppäniemi, & Pihlström, 2012; Rodgers, Negash, & Suk, 2005).

Moreover, they do not focus on the context of smartphones in the telecommunications industry. Limited research focused on determining the influence of service quality of a mobile service provider on consumer commitment with the role of a consumer happiness mediator and the moderation of switching behavior among customer satisfaction and customer loyalty.

Quality of network service provider's services are preceded by consumer engagement, which determines customer satisfaction and the mitigating influence of switching behavior between customer satisfaction and customer loyalty, thus, customer loyalty acts. So, this research is filling the gap regarding to the empirical literature discussed and find out how successful the 4G projects launched in Pakistan are.

1.3 Problem Statement

There are many problems in the field of telecommunication sector of Pakistan, concerning with quality of services, satisfaction and customer switching the product or network. Due to the innovation in mobile phone industry every customer want to be upagrade for maintain the social standard of community. Switching barrier create a challege for all service providers with rapid change in technology day by day.

1.4   Research Questions

1. Whether and how service quality characteristics related to customer loyalty?

2. Whether and how customer satisfaction influences customer loyalty?

3. Whether and how customer satisfaction mediates the relationship between service quality and customer loyalty?

4. Whether and how the switching barrier moderates the relationship between customer satisfaction and customer loyalty?

1.5   Research Objectives

Comprehensively, the present investigation's purpose is to explore and determine the projected model and to recognize the linkage among service quality characteristics and consumer loyalty with the mediation of customer satisfaction and moderation of customer switching barriers among customer satisfaction and consumer loyalty. A more explanation of the aim of the study offered below: 1. To identify the relationship between service quality characteristics and customer loyalty.

2. To identify the relationship between service quality characteristics and customer satisfaction.

3. To identify the relationship between customer satisfaction and customer loyalty.

4. To explore the mediating role of customer satisfaction between service quality and customer loyalty.

5. To explore the moderating role of switching barriers between customer satisfaction and customer loyalty.

1.6   Significance of the Study

The research provides the guidelines to all mobile phone service providers on how they make improvements in services and minimize the switching barriers among

customers. If the telecom companies follow the innovative tool and techniques such as the digital payment system in which customers feel comfortable then they are to make better-satisfied customers with their service and main loyalty level for long-lasting benefits. The study also provides effective guidelines to national and international policymakers and practitioners on how they bring better improvement in telecommunication services and the sustainability of the performance. The importance of the mobile sector to Pakistan is significant and rising rapidly. It is a dynamic funder to the economy and is reviving the source of people living style, businesses and government bodies function and cooperate. With slowing GDP growth combined by increasing population, the jobs, taxes and productivity gains created by the digital environment are essential to supportive of the health of Pakistan's economy and society moving forward.

1.7 Plan of the Study

The thesis is divided into five chapters. The entire study is structured as follows; Chapter 2 includes the literature reviews of the previous studies and hypotheses for the study. Chapter 3 covers the data description and methodology of the current research study. Chapter 4 covered the results and findings. Finally, discussion, conclusion, recommendation and limitation of the current research study also future direction covers section 5.

Chapter 2

Literature Review

A literature review is the foundation of various theories and related literature relevant to researchers, scientists and academics in this study. This is a prerequisite for a thorough study and provides thought and direction for the study in the given manner. It involves theoretical fundamentals of quality of service, followed by customer relationship management and customer loyalty. This also contains empirical research on the association between quality of service, customer relationship administration and customer loyalty.

Quality is the primary success in various industries, and increasing customer prospects are a key feature in the success of any business. Slack, Chambers, and Johnston (2010) argue that no individual explanation has been found, which is generally accepted by service quality researchers, but different definitions have clearly defined different researchers who have worked on service quality. Most researchers define quality as being customer-friendly (Juran, Gryna, & Bingham, 1974), according to customer needs, some investigators define quality as fitness for use, and others consider it as customer satisfaction, customer satisfaction, or performance by standards. Service quality is the most imperative strategic momentum for a service provider to gain the competitive benefit, so it should be enhanced and well-measured (M. A. Lee & Yom, 2007).

Moreover, measuring the service quality, (Parasuraman, Zeithaml, & Berry, 1985) developed a scale called SERVQUAL, which defined service quality as the gap

among anticipated service quality and perceived. Research shows that the superiority of banking facilities explored consumer gratification and loyalty fundamentally (Jabnoun & Al-Tamimi, 2003). According to Parasuraman et al. (1991), organizations collect industry information and gain competitive benefits by improving service quality with the adoption of technology to meet customer needs. For many years, many researchers have been developing a service perspective (Ramsaran-Fowdar, 2007). H.-S. Chang (2008) arguments in which various concepts of quality of service must be understood from the client's state of mind because clients have diverse ethics, their calculation is different and their conditions are dissimilar too.

(Zeithaml, Parasuraman, & Berry, 1990) added more than the quality of the service is fundamentally recognized, meaning the customer's experience with the service seen by the client while serving the service. Kumbhar (2011) argued that quality of service is taken into account in the manufacturing, manufacturing and delivery procedure not just in the final product and service. For this reason, the obligation of employees is imperative to the production of end products or services and to participate in the reorganization process.

2.1 Service Quality

While the term "service quality" is strongly applied in the service sector (also acceptable for goods), the concept and related research in this area have been developed in the goods sector. The main contribution was made by (Zeithaml, Parasuraman, & Berry, 1985). They recommended that the value of the quality of the service would be changed for goods and services and described the quality of the service as a global judgment or view of service excellence. Zeithaml, Berry, and Parasuraman (1988) proposed a model called SERVQUAL to evaluate customers' observations of service quality. Grönroos (1984) established a Nordic framework of service quality. This model assumes that service organizations provide two forms of quality, namely: technical quality and efficient quality. What the customer receives is called Technical quality (Fischer, 2012), and the way services are provided to

customers is functional quality, or how the customer receives services. Edwardsson et al. (1989) planned service quality as a multi-dimensional design and recognized technical quality, integration quality, functional quality, and product quality as four characteristics of service quality.

Reichheld and Sasser (1990) argued that companies can profitably serve customers without resorting to abandonment, which can lead to less rejection of customers and consequently business performance. Explored that a broader understanding of the quality of customer services, such as suggestions and positive word of mouth, has greater behavioral benefits for the organization. Patterson and Spreng (1997) proposed an integrated model that assumes that service quality is a behavior. Therefore, customer satisfaction and dissatisfaction with the previous view helps to create a perception of the quality of service. Johnston (1995) recognized some as satisfactory and unsatisfactory as characteristics of service quality. He said that customer-customer interaction has a significant influence on customer loyalty. Zeithaml et al. (1996) stated that customer behavior mediates service quality and a firm's financial performance, and improving service quality may extend fortunate behavioral intentions.

Brady and Cronin Jr (2001) estimated based on assessing outcomes, interaction with the service employer and the quality of the environment. Suura. M. (2003) initiate and proved that service quality could not be seen as a gap between perceived service quality and predictable expectation, but it can influence customer perceptions. The overall quality of the service can be seen as an assessment of services. Johnston (1995) suggested that customer satisfaction and retention require effective service recovery from organizations. attributed the quality of the service to a multiplicative strategic quality.

2.2 Service Quality and Customer Loyalty

Korea is one of the rapidly growing mobile phone industry because of the expansion of fast speed 3G and 4G smartphone communication networks. As of December 2014, smartphone user of the Korean's population was 80 percent (Kim, Wong,

Chang, & Park, 2016). Companies could earn huge profit and competitive edge, and consumer attachment with declining operating cost, and maximum profit on a single customer, Other than customer happiness with the company and play a vital role in developing customer retention (Mittal & Kamakura, 2001).

Service quality straightly impacts the cognitive engagement as the buyer's tendency about a product as a meaning of mental processes. This incurs mental attachment, priority and engagement about the product and service. Further consumer loyalty was stated as the level of frequently buying patterns in consumer's benefit to priority and buying intent and cognition process and consequently in brand engagement (Bloemer, De Ruyter, & Peeters, 1998). We can say that banking sector service quality straightly influences consumer engagement. This investigation provides some practical suggestions for the banking sector to improve customer commitment. Firstly, the bank should improve their service quality to increase consumer happiness, which further influence customer loyalty (Sitorus & Yustisia, 2018).

The aim of such an investigation to explain the relationship among quality and attributes of the service consumer commitment in the retail banking industry of Bangladesh. The investigation explores the most important characteristics in the baking environment, which might use the evaluation feature of banking experienced by consumers (Siddiqi, 2011). The relationship between service and consumer loyalty can deliver inspired ideas relating to increasing facilities to make a competitive move in the retail banking industry of Bangladesh. Research conducted on tourism agencies their tourism service qualities has a direct and significant impact on customer loyalty (Setiawan & Sayuti, 2017).

The connection between quality service and consumer loyalty has been massively investigating in many service scenarios. The necessary characteristics of the facility show that the standard of service would be set on the time-of-service delivery, that would be judge by the customers of the specific company and industry product and services, consumer who taking services that define their loyalty with the product and service (Kiran & Diljit, 2017). The companies must recognize the customer mindset and their need want and learn their usage pattern and perceives

the product services and that product and services satisfied the need of customers. Service quality is observed as vital since it gives rise to consumer loyalty, advantage, low cost, customer commitment and retention (Joudeh & Dandis, 2018).

The findings of study establish the impact of the internet quality service on the consumer gratification in an optimistic way, which means that standard of facilities and their quality on the consumer happiness in a direct way, that means that the standard of the quality of service that is provided for the consumer could have an impact on the loyalty in the shape of appealing them to the service and gratify them with the degree of the services that anticipated (Joudeh & Dandis, 2018). The investigation objective of the local market, shopping mall quality service improve loyalty (Sivapalan & Jebarajakirthy, 2017). Inside matters about service superiority have been involved, spreading the loyalty pattern and directing to the awareness of the "facility advantage chain (Heskett & Sasser, 2010). The investigation showed in Spain because of the current enhance of the fast-food restaurants in such country, fast food quality and utility as again by the chrematistics (e.g. Quality food, service quality, environment), gratification, trust and commitment between fast-food consumers (Carranza, Díaz, & Martín-Consuegra, 2018). These investigations try to provide minimum practical understanding for the financial service delivery in facilitating customer loyalty to the e-banking sector. A similar impact of quality service on consumer loyalty has been explored in different online and electrical delivery of quality and service, like as online transaction concept (Shankar & Jebarajakirthy, 2019).

Service quality may increase the consumers' awareness of the brand status and enhancement their loyalty (Saha, 2009), Once consumers' experience excellent service quality, their understanding of the product service enhance that motivate the consumer and their purchase intention and share with others (Hapsari, Clemes, & Dean, 2017). C.-H. How service influence consumer happiness and loyalty for marketable, positioning that brand familiarity have impact the connection among quality service and satisfaction of consumer further impact on the consumer loyalty (Huang, Lee, & Chen, 2019). The research described the connection between the individual factors of service quality and customer loyalty (Izogo & Ogba, 2015). A

broad agreement is yet to appear on the influences of the distinct characteristics of obligation on customer loyalty, the study provides strong justification that service assurance translates the loyalty of the customers (Izogo, 2017). The influence of facility standards on client commitment in the financial industry in Zimbabwe. Quality of facility is viewed as the main factor of consumer loyalty. This investigation determines how e-service quality as well as food quality influences loyalty to online food delivery services. The direct influence of e-service quality and food quality on online loyalty (Suhartanto, Helmi Ali, Tan, Sjahroeddin, & Kusdibyo, 2019). We have sufficient arguments and literature available that support the connection of facilities standard and client commitment that level of services influences consumer loyalty. Based on the aforementioned arguments, we hypothesized that

H1: service quality have a positive influence on customer loyalty.

2.3   Service Quality and Customer Satisfaction

Numerous investigations have performed that service quality directly positively impact on customer satisfaction (M. Ali & Raza, 2017). Service quality characteristics that applied a significant effect on customer satisfaction. These findings analyzed that service quality can significantly expect customer satisfaction (Nunkoo, Teeroovengadum, Ringle, & Sunnassee, 2020).

Identify the durable relationship between facility standards and consumer satisfaction. The investigation on customer's air cargo terminal in Taiwan specified that service quality has shown the most significant impact on client happiness. The terminal services make more satisfying to the customers (Setiawan & Sayuti, 2017). E-Banking service quality on customer satisfaction in the Lebanese banking sector. E-Banking services, which analytically examine that there is a direct association between the determinants of internet banking service quality and customer satisfaction with banks (Hammoud, Bizri, & El Baba, 2018). A study conducted in the Palestine Islamic banking quality of services banking play role in measuring the performance of bank that translate the customer satisfaction with the particular bank in Palestine. The findings of the study also prove this relationship that

Islamic bank service quality significant effect on customer satisfaction (Alnaser, Ghani, & Rahi, 2018).

Study on website service quality on customer satisfaction in an E-commerce company, website efficiency is a very significant feature of customer satisfaction. The attention is on an online travel ticket booking network on an internet site. The study suggests overall satisfaction from service quality significantly affects travel ticket booking and satisfaction related (Ajay Kaushik & Potti Srinivasa, 2017). The results of the study indicated that the quality of facilities has a positive and significant influence on customer gratification (Napitupulu et al., 2018). There is an optimistic association between service quality, consumer gratification, and corporate image. Study on B2B technology services industry. Cronin Jr, Brady, and Hult (2000) who investigated the sporting, transference, entertaining, fast food, and health care service sector, have hardly evaluated customer satisfaction in a B2B setting. Results show that brand awareness to the customers and the quality of brand create satisfaction in the customer about the brand that makes loyal with the brand and long-term relationship with the brand. Results have also shown that service quality and brand appreciation have a significantly positive influence on customer satisfaction (Huang et al., 2019).

Customer pleasure is the result that consumers get services in which receive exceeds their expectations. In advertising, this is observed as a global assessment of service knowledge over time (Kim et al., 2016). The quality of service usually results in customer satisfaction. Many researchers in various businesses have proven this association. For example, (Ngo & Pavelková, 2017; Rod & Ashill, 2009) in banking, in the hotel business. However, research on these relationships is of little importance, and the subject merits further study. Consumer satisfaction reflects the quality of the products or services providing to the customer in a positive way, and improved customer satisfaction as well as improved levels of service (Bilan, 2013). Additionally, the higher quality of customer service, the higher the likelihood that they have be satisfied with the service provider. Food quality service makes satisfaction to the customers from particular food items and dimensions (food, service, and physical environment), satisfied with the foodstuff

customer response and behavioral intention in the setting of the restaurant industry (TRAN & LE, 2020).

Service quality is the forecaster of customer satisfaction. Another study about the fast-food sector not only offers delicious food but also supports its service quality to improve customer satisfaction. Further executives can make profits by attractive their service quality through fulfilling customer satisfaction (Liu, Lee, & Hung, 2017). Therefore, service quality is the major factor to influence customer satisfaction. Substantial arguments and literature are available that provide the base in the positive association of service quality with customer satisfaction. Hence, we hypothesized that

H2: Service quality have a positive influence on customer satisfaction.

2.4   Customer Satisfaction and Customer Loyalty

Investigations previously revealed a significant impact of customer satisfaction toward customer loyalty. Thus, the higher the service quality, the higher the customer satisfaction (Sitorus & Yustisia, 2018). The most common interpretation of customer satisfaction is the sensitivity that is produced from an assessment procedure of what has been received, projected, leading to purchasing decisions as well as needs and wants to be linked with the decisions then a product fulfills the need that makes loyalty to the customer. The research found significant and positive connection (Setiawan & Sayuti, 2017).

A study conducted on the influence of service quality on customer satisfaction, loyalty, and happiness in five Asian countries where service quality as having an important influence on customer satisfaction influence on customer loyalty. Positively moves of (Gong & Yi, 2018). A study conducted in the hotel industry influences customer satisfaction, experience on loyalty and brand power. The study established the significant influence of customer satisfaction on customer loyalty in theme. Finding exhibited. The previous investigations determine the

effect of the service recovery procedure on tourist satisfaction and loyalty within the hotel industry. The presence of a relationship between satisfaction and loyalty has been considered from several facets within numerous industries (Cheng, Gan, Imrie, & Mansori, 2019). The direct impact of CSR on customer satisfaction and that a greater level of customer satisfaction typically findings are increased customer loyalty. Customer satisfaction, and corporate image, as well as their impact on customer loyalty in Taiwan's life insurance industry (Huang et al., 2019). Highlighted that trust is a stronger emotion than satisfaction and it better predicts loyalty. They emphasized the significance of customer satisfaction in the studies of customer loyalty. Most commonly customer satisfaction is measured as a dynamic antecedent of customer loyalty. Finding established a straight connection between consumer gratification and consumer engagement. The study found consumer pleasure as a major driver of customer loyalty (Leninkumar, 2017).

The strong interrelationships among service level, client fulfillment, and consumer commitment. consumer happiness significantly affects consumer engagement. This investigation also indicates customer satisfaction has a significant and positive influence on customer loyalty (Liu et al., 2017). A substantial level of service administered body of knowledge had revealed the connection between consumer fulfillment and client devotion.

The finding of the study shows hospitals could expand customer satisfaction and loyalty through effective procedures, employee engagement, and service quality. The association between satisfaction and loyalty has been considered by various researchers and the outcome of our research maintains their attitude (Kasiri, Cheng, Sambasivan, & Sidin, 2017).

The investigation has also explored the connection between service quality, customer satisfaction, customer appointment, religiosity and customer loyalty as an entire, customer satisfaction and customer engagement which have a positive direct impact on customer loyalty (Abror et al., 2019). To enhancing customer satisfaction and loyalty by improving service quality, customer satisfaction have lead to customer loyalty, influence repurchase intentions. The most important facet of customer satisfaction is to lead to customer loyalty and profitability. The study found

that customer satisfaction significantly impacts customer loyalty (Minh, Nguyen, & Cuong, 2018). The conclusions on the significant influence of value facilities on consumer happiness and consumer commitment. Study finding shows that advanced levels of quality of facilitating consumer would drive to advanced degree of consumer happiness that engage the customer with the product or services that create loyalty for the customer (H. H. Chang, Wang, & Yang, 2009).

Customer loyalty refers to a customer's decision to reuse a product and services in the same supplier in the future (Jang & Noh, 2011; Jones, Walker, & Robertson, 2000). Many studies support the idea that there is a direct relationship between customer satisfaction and loyalty (Gao & Bai, 2014; Vázquez-Casielles, Suárez-Álvarez, & Del Río-Lanza, 2009).

Results indicated that the quality of services has a significant straight and direct effect on client fulfillment on consumer loyalty (Preacher & Leonardelli, 2012). Despite the rich literature available that support this argument and that customer satisfaction has a positive influence on customer loyalty. And literature provides sufficient information that provides the base to the positive relationship of customer satisfaction with the customer loyalty. With the respect of above mention argument. We hypothesized that

H3: Customer satisfaction have a positive influence on customer loyalty.

2.5 Customer Satisfaction Mediates the Relationship between Service Quality and Customer Loyalty

The study exposed that customer satisfaction somewhat mediates the association of reliability and customer loyalty in their study of public organizations in the Malaysian region (Ismail, Haron, Ibrahim, & Isa, 2006). Olorunniwo, Hsu, and Udo (2006) study analyzed that consumer gratification potentially makes the linkage among quality of services and buyer trustworthiness in the hospitality sector

in the USA. Yilmaz, Ari, and Gürbüz (2018) examined the mediating connection among quality of facilities and its characteristics, consumer gratification and consumer loyalty in the Turkish banking sector, wherein the banking industry how much banks provide quality service that makes satisfied then it makes loyal the customer. Moreover, (Kaura, Prasad, & Sharma, 2015) declared that customer satisfaction assists as a mediating variable between service quality features and customer loyalty in the various studies presented by literature service quality make the customer more pleased with the services and products that satisfaction make the loyalty of the consumers. The present research concern with the paradigms of service quality, customer satisfaction and customer loyalty.

They stated that the influence of tangibles on affecting feedback of customers such as the sense of preference, easing and the feeling of excitement directed to a positive effect on customer satisfaction (Leninkumar, 2017). In technology-based banking, customer satisfaction is highly affected by customer service. Meanwhile, customer satisfaction is the strongest predictor of customer loyalty, the executives would give more importance to customer satisfaction.

If a bank frequently satisfies the customer, that customer have remain to do dealings with the same provider (Keisidou, Sarigiannidis, Maditinos, & Thalassinos, 2013) and recommend the bank to others that make them more loyal to the customers. The study establishes the mediation of customer satisfaction, an indirect significance of service quality on customer loyalty was detected and explored in numerous studies which shows that a good service quality increases the satisfaction that in turn influences customer loyalty (Caruana, 2002).

Lately, Choi and Kim (2013) found that the consequence quality had a potential influence on consumer happiness and client devotion. Moreover, it was supported that consumer gratification presenting a linkage mechanism among the supposed quality and loyalty in numerous organizations (Hutchinson, Lai, & Wang, 2009). The mediation framework was utilized in this survey to exploring the mediating roles of perceived value and customer satisfaction is the result of procedure quality and consequence quality on customer loyalty. customer satisfaction completely facilitated the association between process quality and customer loyalty. Customer

satisfaction and loyalty have a great impact on the tourism industry where more service levels increase the loyalty of customers. To develop the prevailing theory, future investigation should reflect the role of service recovery, customer satisfaction and customer loyalty in the setting of other service situations (Cheng et al., 2019).

The linkage among service quality and customer responses, such as customer satisfaction, buying intention and customer loyalty, service quality enhance customer satisfaction that further influences customer loyalty (Shankar & Jebarajakirthy, 2019). Technology customer service quality influence customer satisfaction and then the satisfaction of customer makes the committed the customer with the product and brand that make them loyal to the technology or product or the technical facility (Iqbal, Hassan, & Habibah, 2018). The outline of this investigation works shows the transitive connection among services standard, buyer requirement and consumer commitment. In the investigation of customers of Chinese mobile communications networks, it was analyzed that consumer gratification has an optimistic influence on client faithfulness (Makanyeza & Chikazhe, 2017). Service quality positively links with satisfaction, which in turn positively affects loyalty (Izogo & Ogba, 2015).

A study conducted in hospitality industry service quality impact on the customer satisfaction that in turn effect on the customer loyalty, while the service of hotel food room environment makes the customer satisfaction which gradual service quality increase satisfaction that makes the customer loyal with the product and service (Myo, Khalifa, & Aye, 2019).

Thus, variable customer satisfaction is mediating variables that have an indirect influence in mediating variable service quality and customer loyalty. Service quality is a key factor in enhancing customer satisfaction and customer loyalty (Irpan & Ruswanti, 2020). Despite the substantial literature provide the base to this argument and make the linkage mechanism of customer satisfaction among service quality and consumer loyalty. Based on the aforementioned arguments. We hypothesized that

H4: Customer satisfaction mediate the relationship between service quality and customer loyalty.

2.6 Switching Barrier Moderates the Relationship between Customer Satisfaction and Customer Loyalty

Customer satisfaction does not guarantee that customers was remain loyal and behave positively towards the company (Bennett & Rundle-Thiele, 2004). They may be attracted to other service providers who offer more attractive services. On the other hand, some factors affect purchases where satisfaction is not relevant. For example, customers may stay with the current supplier because of barriers to leaving the relationship. A key point that can be used to understand this situation is change barriers. It is believed that creating two switching barriers rather than providing excellent service can be a strategy to retain existing customers and build a company's reputation.

An auspicious relationship with the brand. This can happen because of convenience, habit, or because the barriers to alteration are too excessive (Dodd, 2002). Jacoby and Chestnut (1978) explained the perception of oneself as a consumer orientation near a brand as a purpose of psychological procedure. This includes the attitude and commitment of the brand. Also, customer loyalty was reflected in the mark of endurance in customer support in the relation of preferences and meanings and the psychological procedure leading to brand commitment (Sudhakar, 2012).

The first is to establish behavioral loyalty so that customers are not interested in cheap bidding (Dick & Basu, 1994). The second is to establish transition barriers, so that the costs (financial, time, and psychological) of switching to an alternate provider function as barriers or barriers to abandonment. The outflow is a span used to represent the turnover of a company's customer base and that affects customer retention (Quester et al., 2007). M. A. Lee and Yom (2007) observed serious factors that contributed. Additional research on consumer loyalty in Pakistani telecommunications firms shows that the quality of customer service is important (Shafei & Tabaa, 2016). Determinants followed in the research of customer satisfaction and customer loyalty linked with telecommunication (Pumim,

Srinuan, & Panjakajornsak, 2017). The major objective of customer satisfaction plans however it is to expand the customer retention ratio and switching costs play a significant role (H. S. Lee, 2013).

Based on the theoretical argument and empirical evidence, this research indicates the presence of a negative association between customer satisfaction and switching intention. According to them, loss cost states to the consumers' observation of losing social position, association and performance when switching the prevailing service provider, whereas variation cost represents the issues linked to catching a new service company after switching the prevailing one (Quoquab, Mohammad, Yasin, & Abdullah, 2018).

Accordingly, it can be supposed that switching costs may posit a moderating effect on them satisfaction switching association, avoiding the customers from service switching. This supposition is in arrangement with the observed investigation that creates provisions for the moderating role of switching costs (Aydin, Özer, & Arasil, 2005). This research determines the role of switching barriers in the association between customer satisfaction and customer loyalty, predicting the direct influence of switching costs on switching barriers. Essentially, customer loyalty is distinctly examined both by customer satisfaction and by switching barriers (Palamidovska-Sterjadovska & Ciunova-Shuleska, 2017). From the financial characteristic, customer satisfaction and loyalty have great influence in the tourism market in Malaysia because customer advocacy could expand the retention rate and customers have share their positive expertise on the social network (Cheng et al., 2019).

Therefore, switching barriers whose perform as difficulties to defection, such as cost switching costs signify an imperative determinant in describing the tendency to continue with a service company because clients are satisfied to sustain the costs and embarrassments involved in brand loyalty (Gray, D'Alessandro, Johnson, & Carter, 2017). Switching barriers affects positively and significantly on loyalty, which means the higher switching barriers, the higher loyalty. Based on users' responses, loyalty is not only affected by satisfaction but also can be affected by switching barriers (Rachmawati & Mohaidin, 2019). Moreover, this research

investigates only the influence of customer satisfaction, perceived switching costs (Mannan, Mohiuddin, Chowdhury, & Sarker, 2017).

The result of the study shows that switching barriers have a positive influence on loyalty even though the relationship between switching barriers and loyalty is lower than the linkage between satisfaction and loyalty, a positive direct influence of switching costs on customer loyalty that illustrates the advanced perception costs of switching, the more possible the customer have connect with their existing service network (Kassim & Abdullah, 2008). The relationship between brand equity and loyalty was examined by several previous authors, loyalty can be developed through satisfaction and switching barriers as moderators between user experience and customer loyalty (Rachmawati & Mohaidin, 2019).

H5:Switching barrier moderate the relationship between customer satisfaction and customer loyalty; such that the switching barrier weakens the relationship when customer satisfaction high with customer loyalty.

2.7   Theoretical Framework
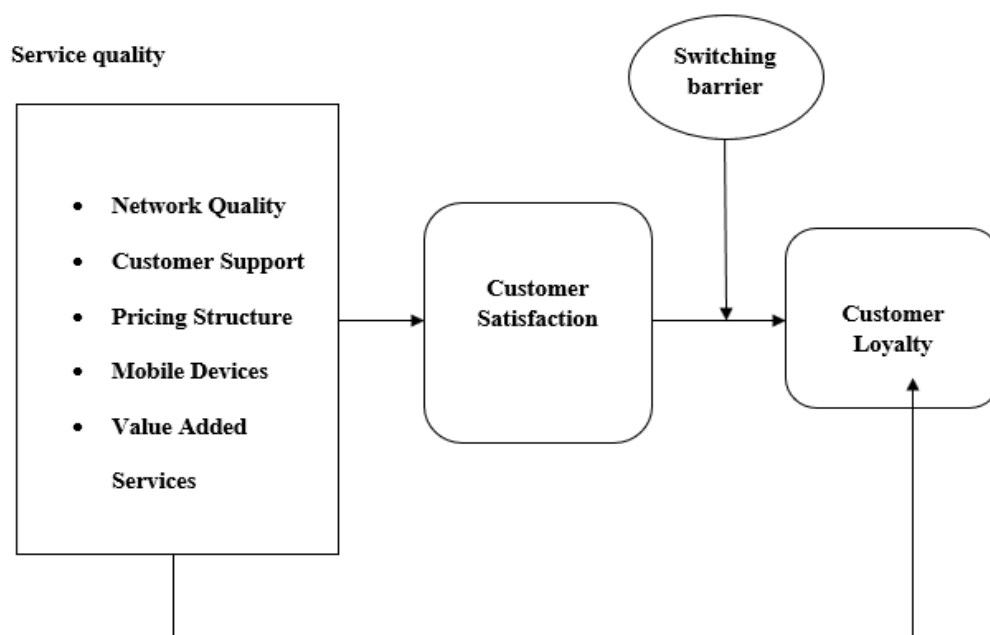
FIGURE 2.1: Research Model

2.8   Research Hypotheses

H$_1$: Service quality have positively influence on customer loyalty.

H$_2$: Service quality have positively influence on customer satisfaction.

H$_3$: Customer satisfaction have positively influence on customer loyalty.

H$_4$: Customer satisfaction mediate the relationship between service quality and customer loyalty.

H$_5$: Switching barrier moderate the relationship between customer satisfaction and customer loyalty; such that the switching barrier weakens the relationship when customer satisfaction high with customer loyalty.

H$_6$: Customer switching barrier moderates the indirect effect of service quality on customer loyalty via customer satisfaction; such as mediated relationship have stronger when switching barrier is high as opposed to lower level.

Chapter 3

Research Methodology

It is very important to differentiate between research methods and research methodology because these two are very different from each other. The research method involves each technique/method that has been utilized for the instrumentation of research. Research methods or techniques refer to the ways of the researcher in which they utilize in conducting research options. In other words, various study techniques, which have taken by the researcher although reviewing study challenges, known as research methods. In contrast, research practice is a way to resolve investigation issues systematically in any research area. The finalized research methodology is broader than that of research methods. Hence, when we speak of methodology it doesn't mean only the methods but also the logical mindset behind the methods utilized in the context of this investigation and describe the utilization of one technique or method over another so that research results are capable of being assessed either by other or researcher himself. This chapter specifically indicates the methodology to explore the influence of quality of services on consumer loyalty with the mediating role of customer satisfaction and moderation of switching barriers. The discussion in this chapter is related to research design including with population and sample evaluation method, characteristics of the sample and instruments of all the variables and items present in each variable.

3.1 Research Design

A survey approach was taken to apply the current study hypotheses and to explore the presented study framework since it is a low pricing method and a much extensively adopted procedure in the area of investigation. To gather the incredible sum of data personally administered questioner has been adopted. The current investigation is an exploratory study since there is previously an association that occurs in the existing knowledge that better service quality has straight linkage with consumer happiness that association was positive and have a more positive connection with customer loyalty. The present study is cross-sectional research; which means that data is collected on one date because of the cost and time problems. It is a cause-and-effect study because the effects or influence of independent variables were explored to our exogenous variable. The present investigation is conducted in a normal situation in three universities.

3.1.1 Type of the Study

The current study is explanatory and according to (Baxter & Jack, 2008), researchers used this term when they determine the answer to the question and the purpose is to discuss the causal relation between the interpositions. This is a causal/relational study in which the influence of service quality on customer loyalty has been assessed based on respondent self-reported awareness about these variables. The survey was a technique of gathering quantitative data in pre-examined and formulated shapes to establish easier data. Data is gathered from a sample and opinion made on the whole population (Kerlinger, Lee, & Bhanthumnavin, 2000). Even though the sample should be following scientific research methodology. Surveys have two types; relational and descriptive (Rungtusanatham, Choi, Hollingworth, Wu, & Forza, 2003). Relational surveys were utilized to study empirically the association between independent and dependent variables while descriptive surveys utilized to study the present state of affairs. For the current investigation, a relational survey structure was utilized, the reason was the investigator plans to find the links among quality of service and consumer loyalty. In

the respect of the present study, Pakistani public and private service providers networks have targeted to acquire the needed data to obtain the genuine results. In the first phase, the target was to obtain 300 questionnaires but 270 authentic responses were gathered but the valid response was 261 individuals which were utilized in the final analysis. The sample size has been taken for this research has been estimated to constitute the overall population of Pakistan. This have contributed to simplifying the results obtained from the sample on the whole population.

3.1.2   Research Philosophy

Different nature of philosophical approaches are there termed as standard for social sciences that strengthen and support scientific inquiry. Scholars defined it as the fundamental world view or that steer exploration. The researcher's choice towards adopting any particular philosophy possibly influences the choice concerning to data collection instrument and the collecting data interpretation (Bazeley, 2003). The hypothetical deductive research method was backing the present investigation, in which existing theories and previous research were utilized to support and manifest our hypothesis, which have then be empirically tested to the proposed hypotheses confirmation. The hypothetical deductive method or model was an anticipated illustration of the scientific method. According to this method, the scientific examination begins by formulating hypotheses in such a way that could interestingly be fabricated by test on visible data.

According to scholars, this philosophy involves reliable measures for hypotheses testing and analysis. However, present research comprised positivist philosophy, as it assists to deduce logic to pinpoint and confirm planned links. This research structure is best appropriate for our research because it holds on vital concern presuming that reality is yet to be revealed. Here the scholars disengage themselves from the phenomenon which is going to be observed and to continue as purpose as likely and tries best to evade bias that may affect the conclusions of the study. Therefore, after studying theory hypotheses are developed and data is collected as well as analyzed and interpreted. According to (Neuman & Neuman, 2006), all these increase the data collected reliability.

3.1.3 Study Setting

The present investigation is field research because individuals, customers of the public and private mobile network of service providers based on organization type were approached on their usage and they filled the questionnaire in (Brennan, Chugh, & Kline, 2002).

3.1.4 Unit of Analysis

In the present investigated research, the most vital characteristics is the unit of analysis. Therefore, the unit of measurement means individuals or objects whose dimensions and structures are to be analyzed in the investigation. It may be individual, pair, group, industry, country, organization, or a culture from where the researcher collected the data. The current investigation is designed to see the effect of service quality on customer loyalty hence, the unit of analysis was individual because we are studying the mobile service providers of network organizations and as the hypothesized variable indicates i.e. service quality. To examine the influence of service quality of mobile services on customer loyalty the investigation required to proceed mobile services quality to build customer loyalty.

3.1.5 Time Horizon

The technique obtained for data collection for this study was cross-sectional. The data collection took approximately 2 months. The reason for chosing the cross-sectional method is due to time shortage because in thesis completion procedures, the time is short and one must have to complete the thesis in the required time.

3.2 Population and Sample

3.2.1 Population

The population is a set of proceedings, things, persons linked with the attention that the scholars ought to determine. Every project is unique irrespective of the

industry whether it is a construction project, information technology project, or non-governmental organization (NGOs) project, etc. A specified time, budget and scope. This system may create a push on project supervisors because he or she has no other option but to complete the research within the specified requirements. Since the current research, pursue to concentrate on Pakistani public and private mobile service provider organizations.

As in Pakistan, network service-based organization is emerging as a source of competitive advantage. More than 5 companies are providing mobile services with more than 10 small level products every year in Pakistan. Most private based companies are included in it and few Governmental organizations like SCO. Telenor, Jazz, Zong, Ufone, Warid and SCOM are providing all features services to mobile phone users with some upgraded services like 3G and 4G internet technology in Pakistan. Data were collected from mobile service users from Rawalpindi and Islamabad. These involve both all levels of consumers in the field of healthcare, infrastructure, energy, education, social services, hydropower and information technology-related individuals. The telecom market is the anticipated service market for this investigation since the research anticipates understanding the degree of customer happiness and consumer loyalty with mobile phone consumers. Data was gathered from the mobile phone handlers of the twin cities of Islamabad.

3.2.2 Sample Size

The sample size is the characteristic of the population. This is the procedure in which a scholar chose the example of respondents for a study from a population in which he is concerned, this is called sampling (Leary, 2004; Nunnally, 1978). Correspondingly, in quantifiable research, the sampling purpose is to obtain a group of individuals who shows the larger group of individuals, or who give particular information that was required for final analysis. In the social sciences of investigation, sample usage is suggested powerfully as related to study the overall population of the research. The reason is in sampling fewer resources, money, and time is utilized, and the likelihood of data reliability/ consistency is high. As a difference, it is difficult, expensive, time-ingesting and beat to include the entire

population. Moreover, a sample should be enough to characterize the whole population. In the segment of probability sampling, everyone has an equal possibility to be chosen as a sample and in non-probability sampling, it is prejudgment, which observation/case could be shown as a segment from the population. Both types have some advantages and disadvantages but the collection exclusively hinges on research purposes, investigation kinds and types of data. Probability sampling is operative and appropriate when scholars have full knowledge about the population else non-probability sampling should be exploited for sampling.

In the respect of present research, convenience sampling was used and it comes under nonprobability sampling. As there are different arguments about the population of network-based organizations in Pakistan but the exact population is still unknown as it is in starting segment. Correspondingly, scholars recommended that when a particular population was unknown it is possible to adopt non-probability sampling methods. This is what convenience sampling of non-probability methods was applied for this investigation. Additionally, the use of convenience sampling is manifest from the research of (Khan & Rasheed, 2015; Osseiran et al., 2013) leading to Pakistani mobile service-based organizations. Raza, (2020) has also exploited convenience sampling for conducting a study. It is very simple to collect data through taking convenience sampling when the time frame is very short and no various resources for the collection of data.

3.2.3 Data Collection Procedure

Data were collected from mobile service-based organizations on a reference by teachers, relatives and friends. In fact, without social relationships data collection is very difficult specifically in Pakistan. However, to approach maximum respondents every possible effort was utilized. The respondents were requested to help and provide consent in data collection. For confirming the confidentiality of information provided by participants a cover letter was attached to the questionnaire. The cover letter with no doubt showed that the research is being carried out for scholarly objectives. Respondents were pledged of the privacy of their names and responses so that the respondents do not feel hesitation to fill the questionnaire

conclusively. Data were collected solely from mobile service-based organizations for all variables. Moderating variable (switching barrier), were reported by the management of different organizations, so in the present research major purpose is to study the mobile service providers service and quality and customer response. Finally, Different steps were carried out to ensure the anonymity and accuracy of the responses (Ghahramani, Zhou, & Wang, 2020; Judge, Scott, & Ilies, 2006).

The individual base research study was conducted by the scholar to gather the answers from the mobile phone users of various educational institutions and questionnaires were the mean of the data group. Queries questions relating to the questionnaire were replied at the point of the respondents and questioner were individually circulated to the keen mobile phone users. Questioners were gathered back from the mobile phone individuals after filling the all questioners. It was a volunteer struggle by the participants as we have not presented any inducement for the conclusion of this questioner. August 2020 was the period for the gathering of data. This data was cross-sectional that was gathered from Federal Islamabad base institutions. Data was collected in a well-planned way because an entire program was managed before gathering the data. As per this project, data was gathered in two visits in every university; in the first visit, data was contained from those mobile phone users who were accessible on grounds of universities and willing to answer. In the second visit, data was gathered from those mobile phone users who were accessible for replying in university areas.

3.2.4 Handling of Received Questionnaires

Received questionnaires were concisely determined to check the missing data. The questionnaires received were having some issues of missing values means that there are some questions in a questionnaire that were not answered by the respondents. In the quantifiable investigation, an important characteristic is to grip on the missing data, because it creates some serious problems. One it establishes in numerical power of the data. Statistical power means statistical techniques analytical capacity to determine any significant influence in the observed data set (Roth & Switzer III, 1995).

Furthermore, missing data also affect the accuracy of estimated variables. Guidelines are existing in the literature for the handling of missing data. The most important techniques for missing data handling according to (Roth & Switzer III, 1995) are mean replacement, regression assertion and listwise omission. In mean replacement, the mean value is extracted for missing reply. In regression attribution, the regression equation is developed based on associated variables for assigning and estimating missing values. In listwise deletion, if there is any missing data, all this type of data firstly removed according to the participants. Various techniques have their pros and scams.

I talk about the listwise deletion approach it takes into attention that only participants should be original responses and scholars don't enter any other type of data set but if there are small missing values then this technique reason loss of a large amount of data and effect the sampling method as well. The mean replacement method force on saving a large amount of data but the disadvantage is that it may affect the original connections that have been revealed by participants. Though, this issue can be mocked if the final collection in the questionnaire is missed or missing values are small. In respect of present research, based on questionnaires reviewed from the respondent and after stamping of the data it was understood that there are missing values. To handle missing values, a mean substitution approach was applied. The reason was in every questionnaire less than five items were missing.

3.3   Sample Characteristics

In the present investigation, questionnaires were intended and employees respond to that questionnaire we requested various personal information from respondents. This demographic substantially varies according to the research area nature. Usually, age, gender, education and experience ask from every respondent for all investigations. In the present research, we asked about age, gender, qualification, experience and designation of employees from dissimilar private and public universities. In given below some facts of demographics and sample characteristics:

3.3.1   Gender

Gender is fundamental, in which purpose is to hold gender equality. Subsequently, it is also estimated as an active portion of demographics. The purpose is it differentiates between male and female in a stated sample. In the current study, it has been tried to make sure gender similarity.

TABLE 3.1: Gender Diversification

Gender	Frequency	Percent
Male	213	81.6
Female	48	18.4
Total	261	100

Table: 3.1, depicts the information about gender. The table revealed that the more respondents were male employees comprised of 81.6% and the remaining 18.4% were female employees.

3.3.2   Age

In the present investigation, the first demographic was the user and employee age and respondents occasionally feel reluctance to expose their ages, so for their easiness and comfort range was given.

TABLE 3.2: Age Distribution

Age	Frequency	Percent
18-25	46	17.6
26-33	76	29.1
34-41	62	23.8
42-49	74	28.4
50 and above	3	1.1
	261	100

Table 3.2 shows that maximum respondents were age "between" 42-49 as it constituted for about 28.4%, 29.1% were those respondents having age range "between" 26-33, furthermore, 17.6% of the respondents had an age between 18- 25, 23.1% were the respondents having age range among 34-41 and 1.1% of the respondents were having age between 50 and above.

3.3.3 Qualification

Education is the pivotal constituent of demographics. As education plays a dynamic role in the country's expansion and progress. The table below contains information regarding qualifications.

TABLE 3.3: Qualification Distribution

Qualification	Frequency	Percent
Intermediate	22	8.4
Bachelor	29	11.1
Master	76	29.1
MS/MPhil	124	47.5
PhD	10	3.8
	261	100

Table 3.3 exhibits information related to respondent's qualifications. As the table indicated that the majority of respondents had the qualification of master comprised of 57.8%, 25.7% of the respondents were those who had the qualification of bachelor and 16.6% of the respondent's qualifications were MS/M.Phil.

3.3.4 Experience

This particular contains information related to the respondent's experience. To make it easy for respondents so that they can easily respond to the demographic different ranges were provided.

TABLE 3.4: Experience Diversification

Experience	Frequency	Percent
0-5	101	38.7
6-11	76	29.1
12-17	36	13.8
18-25	24	9.2
26 and above	24	9.2
	261	100

Table 3.4 shows information regarding employee's experience. The majority of the respondents had an experience of 5-10 constituted for 85.1%, 13.2% of the respondents were those having qualifications ranging from 11-16 and 1.7% of the respondents were those who had experienced "between" 17-22.

3.4 Instrumentation

3.4.1 Measurements

The data were collected through questionnaires adopted from different sources. The nature of the items involved in the questionnaire is such that all of them i.e., service quality dimensions, customer satisfaction, switching barrier and customer loyalty has filled by the mobile phone users and mobile service providers.

Three variables such as service quality, customer satisfaction and switching barrier filled by mobile service users. In calculation, the questionnaire of mobile phone service providers as customer loyalty filled by the service users to rate the quality of service. A five-point Likert scale is used to evaluate the service quality aspects, switching barriers, customer satisfaction, and customer loyalty.

The questionnaire which was taken for this research uses Likert-scale category questions that complicated spirits of the respondents to respond their level of contract on a five-point scale reaching from (5=strongly agree, 4=agree, 3=not sure, 2= disagree, 1= strongly disagree) and level of satisfaction on a five-point scale reaching from (5= very satisfied, 4= satisfied, 3= neutral, 2= dissatisfied, 1= very dissatisfied).

To evaluated the service quality aspects, switching barriers, and customer loyalty manifold item techniques have been used on a five-point Likert scale that ranges from strongly agree to strongly disagree and to evaluate customer satisfaction from very satisfied to very dissatisfied.

The scale of this questioner evaluates each of the constructs, network quality, customer support, pricing structure and mobile device. To circumvent any confusion and ambiguity the questionnaires were divided into various sections.

Demographic information such as age, gender, qualification and experience were included in the first section. Section 2 was composed of questions assessing service quality of mobile services.

Sections 3 involved questions assessing customer satisfaction with a mobile service. Correspondingly, section 4 comprised of questions measuring customer loyalty of mobile service users. Furthermore, section 5 incorporated questions assessing the switching barrier.

3.4.2 Service Quality

Service quality was measured with 14 items developed by (Kim et al 2004). The responses were made on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.4.3 Customer Satisfaction

The 4-item scale developed by (Susskind, Kacmar, & Borchgrevink, 2003) was utilized for assessing customer satisfaction. The responses were made on a 5-point

Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.4.4 Customer Loyalty

For measuring the customer loyalty five items scale was adopted (Shin & Kim, 2008). The responses were made on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.4.5 Switching Barrier

The switching barrier as moderating variable was measured by using (M. A. Jones, Mothersbaugh, & Beatty, 2000). The responses were made on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

TABLE 3.5: Instruments

Variables	Sources	Items
Service Quality	Kim el al. (2004).	14
Customer Satisfaction	(Susskind, Kacmar, & Borchgrevink, 2003).	4
Switching Barrier	(M. A. Jones, Mothersbaugh, & Beatty, 2000).	5
Customer Loyalty	(Shin & Kim, 2008).	5

3.5 Pilot Testing

A trial test orchestrated before going to perform main tests, known as pilot testing. According to (Van Teijlingen & Hundley, 2001), it is particularly conducted to test the research instrument viability. It means that before administering pilot testing on research which scholars must be clear about the investigation topic, questions and research tools and methods to reevaluate them to look at how they have virtually performed and if needed it can be adapted accordingly. Pilot testing is vital to test the usefulness of a questionnaire as this gives precious information about considerable abnormalities in questionnaire design.

Welman and Kruger (1999) also disclosed the importance of pilot testing as it helps in indicating equivocal questionnaire items and aids in disclosing imperfections in measurement procedures. It fortifies the inappropriateness and appropriateness of suggested instruments, procedures and methods and provides advance caution to alter them as needed. It aids in circumventing a great amount of money, time and effort, which can be dissipated by utilizing such a questionnaire that fabricates poor and unclear responses and results.

Before going to do anything on a substantial scale, it would be an effective and proactive approach to orchestrate pilot testing, as it has circumvented various risks link to the annihilation of time and resources. Therefore, pilot testing of approximately 40 questionnaires was conducted for the purpose to validate, if results are in line and familiar with the suggested hypothesis or not. After administering pilot testing it was deduced that there was no significant issue in the studying variables and the measurement scales were completely reliable as the threshold value for Cronbach alpha is 0.7 and all the scales have matched the threshold value.

3.6 Reliability of Pilot Testing

TABLE 3.6: Pilot Testing

Variables	Reliability	Items
Service Quality	0.847	14
Customer Satisfaction	0.786	4
Switching Barrier	0.87	5
Customer Loyalty	0.848	5

3.7 Data Analysis

In this research for creating the statistical results, different statistical tools and techniques have been used in social sciences. To ensure the links among variables

scholars and investigators, extract correlations, to study the influence of independent variables on dependent variables regression analysis test has been used and process macros. Moderating and mediating variables by taking the support of SPSS.

These analytical techniques and tools are based on specific merits and demerits, but the selection of accuracy in tests and tools is strongly linked with any study model, research purpose, research type and nature of the data. In the current investigation, we try to check the Amos for discrimination and convergent validity but due to the small sample size, it was not applicable. This method is not only accepted and popular in social sciences but in other disciplines also such as psychology and clinical psychology.

The statistical results add in anxiety whether the theoretical model is valid with the present study sample of data. Certain rule of thumbs has been used in the analysis of Preacher and Hayes Macro. In the present study findings, the data was finalized in three steps. Firstly, demographic variables frequency distributions, such as age, gender, qualification, experience, and reliabilities of variables like service quality characteristics, customer satisfaction, switching barriers and customer loyalty were estimated.

According to various scholars in social sciences item reliability should be greater than 0.70 (Lloyd, Streiner, Hahn, & Shannon, 1994). In this current research work, Cronbach's alpha of all variables was greater than 0.70. However, associations among all the study variables were tested by running the Pearson correlation. Descriptive statistics, Cronbach alpha and correlation were estimated using the SPSS. In the second step, the links among theoretical variables i.e., service quality, customer satisfaction, switching barrier and customer loyalty were tested by taking the linear regression with help of SPSS. In the third stage, mediating and moderating impacts were examined through Preacher and Hayes Macro models 4 and 1 respectively. Customer satisfaction as mediating role among service quality and customer loyalty and moderating role of switching barrier between customer satisfaction and customer loyalty were performed using the Preacher and Hayes process macros in SPSS.

3.8   Research Ethics

In the current study, while conducting research analysis, required ethics and standards were followed and more principally while gathering the data. In the first step, the objective of the study was informed to the participants and after taking the agreement of the participants, their response was attained and incorporated for data analysis.

The respondents were given a guarantee about the confidentiality of the responses as the mobile service users and service providers filled the questionnaire about service quality, loyalty and switching barrier questions and it might make the issues for service providers if the provider of service get information about that they rate him/her negatively. Therefore, the data linked to network franchisers were also kept secret as it obtained organizations related emotions and user feedback.

Chapter 4

Results and Findings

4.1 Descriptive Statistics

The basic dimension of the current research concern on the data in which the study variables has been explained via the findings of the descriptive statistics; it catch the outcome of sample size simply. It explained what data settings and what it movement and how it moves on next. Descriptive analysis of the dataset explains that means, std. dev and series of the data. In this chapter the gathered data from respondents through questionnaires has been used for analysis. Being the most crucial part of this research, it analyzes everything very critically.

TABLE 4.1: Descriptive Analysis

Variables	N	Min.	Max.	Mean	Std. Deviation
Service Quality	261	1.86	4.93	3.9124	0.47874
Switching Barrier	261	1	5	3.708	0.90255
Customer Satisfaction	261	1	5	3.7883	0.87539
Customer Loyalty	261	1	5	3.849	0.78919

Table 4.1 explicit information concerning variables min. and max. values and means and standard deviations. The mean value of the switching barrier was

3.9124 and the standard deviation was 0.90255 reveals that customers agree that they get switching the services of the network companies during the project and minimum and maximum values were 1 and 5 respectively. The mean value of customer satisfaction was 3.7883 and the standard deviation was 0.87539 exhibits that most of the respondents had a propensity towards the disagreement side and minimum and maximum values were 1 and 5 respectively. The mean value of customer loyalty was 3.8490 and the standard deviation was 0.78919 represents that customers agree that their services providers provide good services according to their demands during this study.

4.2   Control Variable

The main purpose of adopting this analysis in which the one-way ANOVA method is to show that either the demographical measures have any significant effect on the DV (customer loyalty). However, study basic aim was to concern on the linkage among research variables, which were executed in the investigation model and their influencing role in our study.

TABLE 4.2: Control Variable

Control Variable	F Value	Significance
Gender	2.227	0.137
Age	3.382	0.206
Qualification	1.794	0.131
Experience	1.286	0.276

Table 4.2, revealed information regarding control variables. As result explains insignificant difference with customer loyalty crosswise gender (F=0.227, p> 0.05), age (F=0.206, p> 0.05), qualification (F=1.794, p>0.05), experience (F=1.286, p> 0.05). Hence, all demographic variables values showed insignificant relationships, its means that the study can'nt control the any demographic variable with a dependent variable no any variable can control for effect on dependent variable.

4.3 Reliability Analysis

This analysis determines the presence of consistency among items used in study known as reliability. To check the scale internaly constant level of reliability analysis was presented. The value of Cronbach's alpha should be between 0 and 1 (Gliem & Gliem, 2003). The high value of Cronbach alpha signifies good reliability and the low value of Cronbach value signifies poor reliability. According to Taber (2018), the suitable value of Cronbach alpha is greater than 0.7.

TABLE 4.3: Reliability Analysis

Variables	Reliability	Items
Service Quality	0.846	14
Customer Satisfaction	0.888	4
Switching Barrier	0.907	5
Customer Loyalty	0.872	5

Table 4.3 shows knowledge about the reliability of the scales. The outcomes of the study discovered that the reliability of service quality was 0.846, customer satisfaction was 0.888 is evident in the literature like (Hong & Zhu, 2006), switching barrier was 0.907 and customer loyalty was 0.872, which was meeting the threshold value and similar with concequences of (Hong & Zhu, 2006).

4.4 Correlation Analysis

The correlation results show whether, and how strongly pairs of variables are related. A correlation is a single number that describes the degree of relationship between two variables. The Pearson product-moment correlation is used to determine the relationship between the variables. The acceptable range for correlation is between -1 to +1. According to Cohen, West, and Aiken (2014) the value of correlation is 0.10 to 0.29 represents weak/ smaller correlation, the value of correlation between ranges of 0.30 to 0.49 represents moderate correlation, and if a correlation

is between ranges of 0.5 to 0.8 then it represents strong correlation. While if the value of correlation exceeds 0.80 then it shows the error of multi-collinearity.

TABLE 4.4: Correlation Matrix

Variables	SQ	CS	SB	CL
Service Quality	1			
Customer Satisfaction	.162**	1		
Switching Barrier	0.12	.874**	1	
Customer Loyalty	0.045	.805**	.757**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.4 determines that data concerning the correlation among present investigated factors. Therefore, results show that service quality has a significant positive relationship with all the variables. Like the correlation of customer satisfaction with service, the quality was (r=0.162**, p<0.05), switching barrier (r=0.120, p<0.05) shows that switching barriers positively correlated with service quality. The switching barrier (r=0.874**, p<0.05) means the switching barrier is positively correlated with customer satisfaction. The customer loyalty coefficient value (r=0.045, p<0.05) shows that significantly positively correlated with service quality. Weak correlation with service quality mean that customer loyalty minor changed by service quality. The customer loyalty coefficient value (r=0.805**, p<0.05). these values show that customer loyalty is significantly positively correlated with customer satisfaction. Furthermore, the correlation of customer loyalty with the switching barrier was significant (r=-0.757**, p<0.05). As it can be seen that the correlation between customer loyalty and switching barrier significantly correlated with each other. The investigation is profable that the independent variable has moderated relationship with the DV (customer loyalty). In above **Table 4.3** describes that various independent, moderator, mediator and dependent variables positively and significantly linked with each other.

4.5 Regression Analysis

To examines the existence of relations among research factors correlation analysis was attempt but it just presents the existence of associations among variables through insufficient help and offers no indication about the expressing relationships between variables. Subsequently, to obtain that usual association of regression analysis has been presented to verify the dependence of every variable one another. Mediated moderation means the mediation effect changes depending on the level of the moderator variable (Muller, Judd, & Yzerbyt, 2005). According to Bucy and Tao (2007), initiating the mediated moderation requires performing tools for three statistical models.

4.5.1 Simple Regression

TABLE 4.5: Simple Regression

Predictor	Customer Loyalty		
Step 1	β	R^2	Sig.
Service Quality	0.090	0.003	0.369

Hypothesis 1 examine that service quality have positively influence on customer loyalty.

To respect this hypothesis, the findings available in the table show strong justification. In the number one step study check the control variable as demographic no any variable significant in one-way ANOVA test with dependent variable customer loyalty. Results explore that service quality has an insignificant linkage with customer loyalty. The $\beta=0.090$ with the insignificant p>0.349 where service quality insignificantly linked with customer loyalty its mean service quality no direct impact on customer loyalty, it means that hypothesis 1 has been rejected. Similar insignificant results have been found in the study of (Fida, Ahmed, Al-Balushi, & Singh, 2020; Izogo, 2017; Kumar, 2017; Mohmmed, Ibrahim, & Ali, 2017) in which they found that service quality mostly dimensions insignificantly related with customer loyalty.

4.5.2 Simple Regression

TABLE 4.6: Simple Regression

	Customer Satisfaction		
Variables	β	$\mathbf{R}^2$	**Sig**
Step 1			0
SQ	0.280	0.027	0.008

Hypothesis 2 shows the customer satisfaction have positively influence on customer satisfaction.

In the respect of this hypothesis, the findings available in the table who provides strong justification. In the number one step study check the control variable as demographic no any variable significant in one-way ANOVA test with dependent variable customer loyalty. Results examine that service quality has a significant linkage with customer satisfaction. The β=0.0.280 significant at the level of p<0.008 where it shows that service quality is significantly linked with customer satisfaction. Similarly, the value of (R^2=0.027) prescribed that service quality contributes 2.7% change in customer satisfaction. The above model shows that service quality has a significant positive influence on customer satisfaction, which means that hypothesis 2 has been accepted. In the previous findings, scholars found a significant positive impact of service quality on customer satisfaction in the telecom sector (Kumar, 2017; Wang & Shieh, 2006).

4.5.3 Simple Regression

TABLE 4.7: Simple Regression

	Customer Loyalty		
Variables	β	$\mathbf{R}^2$	**Sig**
Step 1			0
service quality	0.726	0.648	0.000

Hypothesis 3 examine that customer satisfaction have positively influence on customer loyalty.

In the presence of this hypothesis, the findings available in the table provide strong justification. In the number one step study check the control variable as demographic no any variable significant in one-way ANOVA test with dependent variable customer loyalty. Results explore that customer satisfaction has a significant positive linkage with customer loyalty. The $\beta=0.726$ significant at the level of p<0.000, where it shows that customer satisfaction is significantly linked with customer loyalty. Similarly, the value of ($R^2=0.648$) prescribed that customer satisfaction contribute 64.8% change in customer loyalty. The above model shows that customer satisfaction has a significant positive impact on customer loyalty, its means that hypothesis 3 has been accepted and similar results found that study of (Kumar, 2017) in which he found that customer satisfaction significantly positive relationship influence on customer loyalty in the telecom sector.

4.6 Multiple Regression

In the regression analysis, mediation and moderation analysis were performed by taking the (Hayes, 2013) process macro. Mediation analysis was conducted to determines customer satisfaction as a mediator between service quality and customer loyalty. In the current situation, here process macros were taken and model 4 has been adopted for the mediation model. Moreover, moderation analysis was adopted to examine the switching barrier toch as a moderator between customer satisfaction and customer loyalty. In the presence of study have applied model 1 and additionally, in this model we extracted the mediated moderation model so this study proposes model 13 was utilized.

TABLE 4.8: Mediation Analysis

IV	Effect	SE	LL 95%	UL 95%
Indirect effect of service quality on customer loyalty	0.2194	0.0956	0.0262	0.4058

N=261, Bootstrap Sample Size= 5000, LL lower limit, CI confidence interval, UL upper limit.

Hypothesis 4 shows that customer satisfaction have mediate the relationship between service quality and customer loyalty.

The results performed in **Table: 4.8**, indicated that the indirect effect of service quality on customer loyalty has a lower level of the confidence interval and upper level of the confidence interval, 0.0265 and 0.4058. Both the ULCI and LLCI have the same positive sign and there was no zero at any level that exists among these two limits. Moreover, this investigation determined that mediation has been confirmed (Kumar, 2017; Shrout & Bolger, 2002). Hence, hypothesis H4 has been accepted, in which customer satisfaction mediates the relationship between service quality and customer loyalty. The statistical results in above table performed that customer satisfaction higly mediated the positive relationship between service quality and customer loyalty in the field of mobile telecommunication sector.

TABLE 4.9: Moderation Analysis

Variable	β	SE	T	P	LLCI 95%	ULCI 95%
Constant	2.8556	0.2666	10.7362	0	2.3318	3.3793
Int_1	0.2017	0.0266	7.587	0	0.1491	0.2541

Hypothesis 5 Switching barrier moderates the link between customer satisfaction and customer loyalty such that customer satisfaction have to weaken the positive relationship with customer loyalty.

The present study has been presented hypothesis 4 of moderation in which hypothesis shows that the switching barrier moderates the link between customer satisfaction and customer loyalty such that customer satisfaction have to weaken the positive relationship with customer loyalty for maintaining the qualities of the services offered by the mobile services providers and consumers who are switching the services than those who are minimum focus on quality services. However, **Table 4.9** outcomes verified hypothesis 4. The basic reason behind the outcome was interaction term of "customer satisfaction and switching barrier" moderates

on the relationship of "customer satisfaction and customer loyalty" has the lower level and upper-level confidence interval of 0.1491 and 0.2541 and both have the same sign and no zero is avaible. Subsiquently, the interaction term indicated that positive and significant regression coefficient (β=0.201, p<.05) means that the switching barrier moderates the relationship of customer satisfaction and customer loyalty such that the switching barrier has weakened the relationship at a high level between customer satisfaction and customer loyalty for less focused service providers compare to whose are lower service qualities. Similar results were found in a study by (Blut, Frennea, Mittal, & Mothersbaugh, 2015; M.-F. Chen & Wang, 2009; Edward, George, & Sarkar, 2010), in which they explored a moderated impact of switching barrier among customer satisfaction and customer loyalty. However, the investigation obtains that hypothesis 4 has been accepted and supported the moderation model.
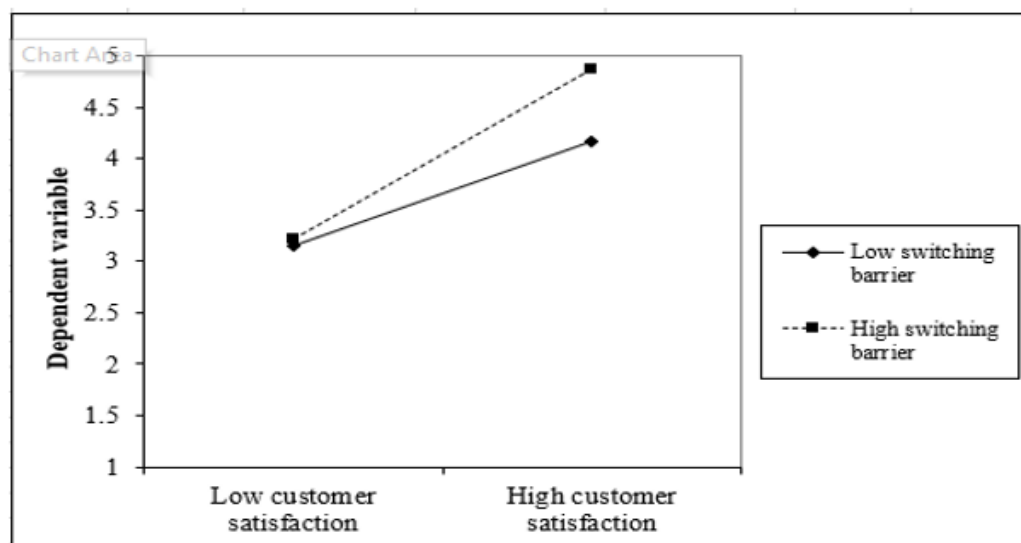
FIGURE 4.1: Interaction Graph

To avail more indication for moderating effect of the switching barrier, the simple slope for the moderator was plotted as specified in **figure 4.1**. As revealed in the above graph, the direction of the relationship between customer satisfaction and customer loyalty was stronger for service providers who are high switching barriers. The figure depicted that when customer satisfaction and the switching barrier were high the owners have high customer satisfaction and vice versa.

TABLE 4.10: Mediated Moderation

Mediator	Switching Barrier	Indirect Effect	SE	Boot LL	Boot UL
Conditional indirect effect (s) of X on Y at values of the moderator (s)					
Customer Satisfaction -1 SD	2.8055	0.1788	0.0788	0.0251	0.338
Customer Satisfaction M	3.708	0.2339	0.106	0.0286	0.4509
Customer Satisfaction +1 SD	4.6106	0.2891	0.1357	0.0392	0.5802

Hypothesis 6 examine that the customer switching barrier moderates the indirect effect of service quality on customer loyalty via customer satisfaction; such as mediated relationship stronger when the switching barrier is high as opposed to lower level.

Table 4.10, provides a strong justification for the proposed hypothesis according to the Preacher and Hayes model 14. The switching barrier was examined through three levels (at 1 SD above the mean, at the mean and -1 SD below the mean) to determines the conditional indirect effects of service quality on customer loyalty through customer satisfaction. The results from conditional indirect effects are depicted in **Table 4.10**.

As estimated, the conditional indirect effects of service quality on customer loyalty via customers satisfaction level become stronger at a higher level (+1 SD) of switching barrier and both upper level and lower-level confidence interval having the same signs and the indirect effect was significant (B= 4.6106) (Shrout & Bolger, 2002). Also, the conditional indirect effects of service quality on customer loyalty through customer satisfaction become stronger and significant at lower level (-1 SD) as indicated by lower and upper-level confidence interval, both have the same sign 0.0251 and 0.338 respectively. So, hypothesis 5 was accepted and fully supported.

4.7   Summary of Hypotheses

TABLE 4.11: Hypothesis Summary

Hypothesis	Statement	Status
H1	Service quality have positively influence on customer loyalty.	Not supported
H2	Service quality have positively influence on customer satisfaction.	Supported
H3	Customer satisfaction have positively influence on customer loyalty.	Supported
H4	Customer satisfaction mediate the relationship between service quality and customer loyalty.	Supported
H5	Switching barrier moderates the relationship between customer satisfaction and customer loyalty; such that switching barrier weaken the relationship when customer satisfaction high with customer loyalty.	Supported
H6	Customer switching barrier moderates the indirect effect of service quality on customer loyalty via customer satisfaction; such as mediated relationship stronger when switching barrier is high as opposed to lower level.	Supported

Chapter 5

Discussion and Conclusion

5.1 Discussion

The main objective of this study was to investigate that how service quality affects customer satisfaction that further leads to customer loyalty with switching barriers in Telecom Sector. The telecommunication sector in Pakistan is the fastest growing sector in the country's economy regardless of considering a complex sector. In the service industry service quality is the key variable for competition. The better a service provider is the higher the chance is that customers have been satisfied which ultimately be loyal. In this study service quality of network service provider is measured along with customer satisfaction and customer loyalty. The effect of the switching barrier on the relationship of these variables is also measured. Data were collected from three different universities. The consequences of this investigation are reliable with past studied.

The preceding researches in the domain of service quality of the telecommunication sector and performance are comprehensive summarizing relevant characteristics of the constructs Kim el al. (2004). Empirical researches on the literature on customer loyalty suggested that variables such as service quality with a dimension of (network quality, customer support and pricing structure) are important variables to study further and have a significant influence on customer loyalty (Izogo, 2017; Johnston, 1995; Kumar, 2017; Mohammed & Shahin, 2020; Nkwede & Okpara,

2017). The main emphasis of this research was to investigate the linkage among service quality, customer satisfaction and customer loyalty in telecommunication-based organizations within appropriate settings of Pakistan. The research also examined the mediating role of customer satisfaction between service quality and customer loyalty; and moderating role of customer switching barrier between customer satisfaction and customer loyalty. The present study was conducted in telecommunication base franchises having different services for their clients and workforce. The results of the study recommend that service providers have a positive impact on customer loyalty which means that customer satisfaction with any product or service increases the loyalty level of clients overall. There is a positive relationship between telecom services and customer satisfaction, which in-depth have a positive association with organization customer loyalty. Therefore, H1, H2, H3, H4, H5 and H6 are accepted and building an association between service quality and customer loyalty of telecom customers through mediating the role of customer satisfaction. This implies that service quality negatively deviates satisfaction of customers which enhances customer loyalty on a minimum level. The study instructed the variable of switching barriers as a moderator. The data analysis on the variable in the appropriate sceneries of Pakistan proves that the switching barrier of customers positively influences the relationship between satisfaction of telecom clients and customer loyalty with products and services. The role of the switching barrier was found to be significant and positively affecting the relationship between customer satisfaction and customer loyalty. The comprehensive discussion on each of the hypothesis is as follows:

5.1.1 Question 1: Whether and How Service Quality Characteristics Related to Customer Loyalty?

To explore the outcome of first question that whether and how service quality characteristics related to customer loyalty, hypothesis 1 was framed. Hypothesis 1 shows that service quality have been positively influence on customer loyalty. The results for this certain in which it was found significant and hypothesis 1 was rejected as the findings suggests that service quality was insignificantly relate with

customer loyalty. Our findings are reliable with theoretically and correspondingly, past investigations have determined that quality services insignificantly linked with customer loyalty of any brand in telecom sector (Fida et al., 2020; Izogo, 2017; Kumar, 2017; Mohmmed et al., 2017).

In addition, more specifically every telecom service has some constraints like time, cost and scope. The customer loyalty of any product or service has the responsibility to fulfil the demand and desire of customer within these specified limitations. Sometimes the situations are not the same as expected, so the telecom services performance not meet the basic requirements and it may take some time, so there is an issue of quality of services decline the satisfaction level of customers and then it creates the overall problem for loyal customers. Hence, people make harsh words, disrespectful and demeaning comments etc. Furthermore, our findings are in appropriate with the findings of (Fida et al., 2020), that there is a no valid relation between service quality and high level of customer loyalty in the individual.

Also, investigator like (Kumar, 2017) found no positive link of quality product with loyalty level. Moreover, these above opinions provide strong justifications for hypothesis 1 rejection that service quality is positively and significantly linked with customer loyalty. When there service quality on clients during the services were performed then people not loyal with brand or service in telecommunication sector.

5.1.2 Question 2: Whether and How Service Quality Influence Customer Satisfaction?

To explore the outcome for question 2 that whether and how service quality influence customer satisfaction, hypothesis 2 was framed. Hypothesis 2 states that service quality have positively influence on customer satisfaction. The results for this hypothesis distinguish strong justifications. Hence service quality significantly and positively linked with customer satisfaction in telecom sector and these findings are consistent with the research of (Kumar, 2017; Wang & Shieh, 2006) with service quality in telecommunication field have a significant and positive effect on

customer satisfaction level. However, such type of services may be likely to attendant aggressive propensity, and hence clients are possibly to behave significantly toward others in their social networking and services in surroundings. Moreover, the link among service quality and customer satisfaction are studied before many times in different prospective but not same case. As mentioned earlier the quality of services are complete the requirement of customer within the specified time, budget and scope. Service providers are bound with these limitations. As everything for the network of any telecom industry is pre-planned and marketers, follow the instructions and implemented the plan in market. Nonetheless, the situations change because no one can predict everything perfectly about the customer liking or disliking according to future. Moreover, when unanticipated situations arise during the service delivery the service providers become emotionally loyal and make positive attitudes with clients and it makes them professional and effective for organization trust.

5.1.3   Question 3: Whether and How Customer Satisfaction Influence Customer Loyalty?

To explore the outcome for question 3 that whether and how customer satisfaction influence customer satisfaction, hypothesis 3 was framed. Hypothesis 3 states that customer satisfaction has positively influence on customer loyalty. The results for this hypothesis distinguish strong justifications. Hence customer satisfaction significantly and positively linked with customer loyalty in telecom sector and these findings are consistent with the research of (Kumar, 2017) with satisfaction level in telecommunication field have a significant and positive effect on loyalty of customers about brand services. Hence, such type of services may be likely to attendant aggressive propensity, and hence clients are possibly to behave significantly when they were fully satisfied from the service compare to other services in surroundings. Moreover, the link among customer satisfaction and customer loyalty are studied before many times in different prospective but not same case. As mentioned earlier the satisfaction level of customers are complete the basic needs and desires within the specified time, budget and scope. Service providers are

bound with these limitations. As everything for the network of any telecom industry always pre-planned and marketers, follow the instructions and implemented the plan in market. Nonetheless, the situations change because no one can predict everything perfectly what things fully satisfy the customer in which he does liking or disliking according to any product or service. Moreover, when surprising situations arise during the service delivery the service providers become emotionally loyal and make positive behaviour with clients and it makes them professional and effective for long last relationship with their satisfied clients.

5.1.4 Question 4: Whether and How Customer Satisfaction Mediates the Relationship between Service Quality and Customer Loyalty?

To investigate the response for question 4, that whether and how customer satisfaction mediates the relationship between service quality and customer loyalty, hypothesis 4 was expressed. Hypothesis 4 states that customer satisfaction will mediated the relationship between service quality and customer loyalty. The results supported hypothesis 4 that customer satisfaction mediates the relationship of service quality dimensions and customer loyalty in telecom sector. The findings are reliable with study output of (Kumar, 2017; Shrout & Bolger, 2002) that indirect effect of service quality on customer loyalty happens via the satisfied response of clients in which customer satisfaction that suggests customer loyalty importance occur. Additionally, customer satisfaction is recognized a middle variable through which service quality influence customer loyalty, the study continued by exploring whether customer Satisfaction have any effect on customer Loyalty. The results lend credibility to the fact that customer loyalty is influenced by customer satisfaction.

The present study findings depict that dimensions of service quality are critical factor of customer satisfaction as predicted. Higher levels of main service qualities have extended higher levels of customer satisfaction. In composite service situations categorized by constant variation in activity and recognizable buying

instability like life insurance activities or opportunities, the long-term attentions of the consumers (dimensions of service quality) could be better performed by beginning and sustaining continuing association with them. Hence, the characteristics of service quality advantages that the consumers could obtain from their rules have surely play a vital role in examining the customer satisfaction. In the management background, since valid service quality is a important mechanism of customer satisfaction, how to enterprise a good telecom service strategy to meet with a customer's demand is very imperative.

5.1.5 Question 5: Switching Barrier Moderates the Relationship between Customer Satisfaction and Customer Loyalty; Such that Switching Barrier Weaken the Relationship when Customer Satisfaction High with Customer Loyalty?

To explore the response of question 5, hypothesis 5 formulated on the basis of previous empirical findings and literature. Hypothesis 5 states switching barrier moderates the relationship between customer satisfaction and customer loyalty; such that switching barrier weaken the relationship when customer satisfaction have to high with customer loyalty.

According to our research outcomes, switching barrier moderates the linkage between customer satisfaction and customer loyalty such that switching barrier have stronger positive relationship for service providers who are very lower level influenced by customers who's switching the services. The findings are in appropriate with the research of (Blut et al., 2015; M.-F. Chen & Wang, 2009; Edward et al., 2010), therefore, current research have extract to concern on how switching barriers might moderate the linkage between customer satisfaction and customer loyalty. So, this study shows that the moderating effects of s witching barriers are found to be statistically significant. Hence, a client switching attitude and the main reasons behind the outcome whose received extensive attention.

5.2 Theoretical and Practical Implication

At the final section of the research study is a new area has been unlocked for customer loyalty in telecom sector where style of management, satisfaction of customers, switching barrier, service quality characteristics has been already investigated and explored with different factors in past literature (Alnaser et al., 2018; Edward et al., 2010; Shankar & Jebarajakirthy, 2019; Shrout & Bolger, 2002; Sitorus & Yustisia, 2018). Management of projects has quickly extended its borders from traditional area of construction engineering and transportation engineering into other parts study outcome from the previous some decades (Stanitsas, Kirytopoulos, & Leopoulos, 2020). Moreover, it constantly higher depends on the effective knowledge and expertise from the various global integration channels and industries. Additionally, project management is a gigantic field that exists and interconnects with numerous other areas, for a sustainable management of any project it play a vital role found by (Larsson & Larsson, 2020).

One of such area is the global development, which extract to improve the health, education and general living standards of public in emerging countries with help of reducing the poverty reduction, better governing system, human rights and capacity of building projects, right time scheduling and pricing of projects. So, the current investigation highlighted the service quality and switching barrier is the core factor to predict the customer loyalty and also has a significant and positive affect on it due to the lower and higher level of customer switching cost. So, the with the pace of global change in project base innovations in organizations working in Pakistan should heavily focus on the better telecom services by service providers and they maintain a loyalty and satisfaction level with time to time updating in service for long last relationship with customers. The rapid change in the construction management tools and machinery on the whole world and due to the global integrations in the projects, project managers should avail the latest tools in any cost for minimize the switching barrier effect from customers. Therefore, project management is increasing its limits toward gigantic field so future students can bring exploration with new and innovative areas of investigation to strengthen the project management literature according to the present study model.

The current research has theoretically implications for best understanding the exogenous variable and moderator switching barrier and outcome variable customer loyalty. First, we categorize the service quality characteristics with working together to enhance the customer loyalty. Subsequently, this study found that contributors of mobile telecom services, in prepaid, postpaid services, which connect their loyalty to their present service provider and then make it satisfaction level in the mind of customer. These consequences could control the more investigation on the immediate/participating influence of customer satisfaction on customer loyalty (Frank, Torrico, Enkawa, & Schvaneveldt, 2014; Kim, Park, Park, Kim, & Kim, 2018).

This investigation exposes the relations between service quality, and customer satisfaction and both these variable direct impact on customer loyalty. Hence, this analysis shows that theoretical implication whose switching barrier moderate the kinds of link between customer satisfaction and customer loyalty.

To the better information in my concept, there is the first moderation connection among these variables with rational and irrational prospective. The findings of this investigation offer valuable perceptions for creating customer tactics to practitioners in the service sections, exclusively by the mobile service providers. In the first, the consequences recommend that firms should be known that enhancing mentally and emotional satisfaction in the similar time period it may help to customer satisfy level and positive feedback for managing the customer loyalty.

Third, the current research focuses whether the appropriate attachment between switching barrier and customer satisfaction is an effective customer approach for educating customer loyalty. Specifically, recognizing the special switching barrier depending on the source of disappointment is suggested to avoid or decrease the converting of dissatisfied consumers.

Hence, increasing the monetary charges like loss of advantages and fines for moving to customers whose are mentally dissatisfied, and construction interpersonal bonds by providing manual help or attractive product and services loyalty to those who are emotionally disappointed are projected to decline their needs and demands to stay with their service significantly.

5.3   Limitation of Research

In this study only three universities were specified for the data collection process and a sample size of 460 was used for the customers of network service providers. The current investigation has some limitations that maybe highlighted in further investigations. First, the analysis of this research may be tough to be comprehensive in diverse situations, due to the concern on the Pakistani mobile telecommunication fields.

The main restriction of this research is that it was a cross-sectional investigation and since the loyalty level and switching barrier of international development projects and brands services may not be purely evaluated with short time period. However, in order to take a concise picture about telecom mobile services a longitudinal research requires to be analyzed. The future researcher may include a particular sector for their studies and may collect data with a large sample size form different population to get their improved and consistent results. We have included all the national development mobile service providers whose operating in targeted population areas of Pakistan, here the analysis of the research may not be widespread in other countries and with prospect of international mobile telecom services providers all over globe.

5.4   Future Research Directions

Furthermore, study is suggested in the area of mobile telecom services in other nations to raise their applicability of the anticipated framework and the findings. We also recommend that future investigation should explore the major and moderating influences of measurements switching barriers in diverse fields containing other prescribed mobile service structure, to better recognize the outcomes by applying on the contextual situations. Second, the present investigation actions substitute pulls as a unidimensional paradigm. From last new decades researches have analytically examined the effects of substitute attractiveness with sub-dimensional measures on customer loyalty (Ghazali, Nguyen, Mutum, & Mohd-Any, 2016).

Future scholars' investigations are stimulated to explore the major and moderating affects of switching barriers cooperating alternative attraction in the framework presented by this investigation. Consequently, the linkage between customer satisfaction and customer loyalty has been studied by several empirical literature about quality services and loyalty of customers in the past (Fida et al., 2020; Wang & Shieh, 2006). Moreover, this research does not cover the measure of service quality as a precedent of loyalty and satisfaction. A evaluation of the analysis in conditions of satisfaction level with the consequences of the influences of mental and emotional satisfaction with mobile service on customer loyalty have effective contribution toward a better understanding of switching barrier among customers and mobile service. However, findings of the moderating role of switching barrier among these variables like customer satisfaction and customer loyalty have contribute to create a beneficial customer technique. Numerous institutions could be extended in future investigation and data can be gathered from various areas like shopping centers and active hospitals. Data collection technique was finalized by use of investigation method only. Quantitative data along with combination of by physical attraction and interviews can be utilized in upcoming investigations. The influence of demographic sections such as income, job status, age, gender, qualification and experience maybe explore with different analytical techniques.

5.5   Conclusion

The results disclose that effective service quality characteristics are the important segment of customer satisfaction as predicted by any service providers in telecom sector. The efficient level in quality of services will expand high level of customer satisfaction and loyalty level. In diverse service environment organized by constant flexible activities and substantial buying uncertainty like internet services, who makes long-term interests of the customers efficient service quality could be better as performed by introducing and maintaining stable links with all type of customers. Here, quality of all level of services offered by mobile service providers delivers benefits that the consumers would get from their regulation have definitely

play a significant part in examing the customer satisfaction about any service or brand. With the managerial level platform, such as pure service qualities are the dynamic part of customer satisfaction, how good service can minimize the switching barrier effect the. among satisfaction level of customers and customer loyalty in telecom sector.

First, this study analytically examines the immediate influence of service quality determinants with customer satisfaction on customer loyalty through developing the hypotheses 1 and 2. Our research outcomes shows that the specific characteristics that make customer satisfaction strong including with the effective customer loyalty for long last relationship with perspective of computational judgement, but also affective satisfaction from effective response by customers to mobile service providers and best reaction to feelings of clients.

Second, this investigation explores the major role of moderating variable switching barrier on customer loyalty mentioned in hypotheses 5. Many investigations consider the major influences of switching barriers on customer loyalty, while the moderate variable influences of these antecedents are under-investigated (Nagengast, Evanschitzky, Blut, & Rudolph, 2014). Therefore, the moderating influences of diverse, concerning on the different types of switching barriers either high or low level. Just financial switching barriers maybe negative moderation but in this study switching barrier positively weaken the relation between customer satisfaction and customer loyalty. Midst satisfied customers in the mental level aspect, making the significant positive association between customer satisfaction and loyalty level of customers in telecom sector in Pakistan.

Subsequently, this investigation may find these consistent outcomes in moderation, making the same qualities to be moreover valid or emotional relationships. A several studies explain the direct and negative influence of customer satisfaction with prospective of these study constructs on customer loyalty (Wang & Shieh, 2006), moreover, the investigation on moderation influence is very rare described and the outcomes are unconvincing. In the background of mobile telecom services, the mediating influences of substitute pull continue under the investigation in furthermore (Chuah et al., 2017).

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Appendix-A

Questionnaire

Dear Respondent

I am conducting a research and collecting data for the topic of " **Mediating Role of Switching Barriers in Determining Service Quality and Moderating Role of Customer Satisfaction on Customer Loyalty**". Your precious time and help is needed by completing the attached questionnaire. I appreciate your participation and assure you that responses will be kept confidential and will only be used for education purpose.

Sincerely,

Mumtaz Hussain,

MS (PM) Research Scholar,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

Section 1: Demographics

Gender	1- Male 2- Female
Age(years)	1 (18-25), 2 (26-33), 3 (34-41), 4 (42-49), 5 (50-above)
Qualification	1 (Intermediate), 2 (Bachelor), 3 (Master), 4 (MS/M.Phil.), 5 (PhD)
Experience(years)	1 (0–5), 2 (6–1)1, 3 (12-17), 4 (18-25), 5 (26-above)

Section 2: Service Quality

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statements					
Network Quality						
1	Your mobile phone service provider has Good Call clarity	1	2	3	4	5
2	Your mobile phone service provider has Good coverage	1	2	3	4	5
3	Your mobile phone service provider has up-to-date equipment.	1	2	3	4	5
4	Your mobile phone service provider has better network quality	1	2	3	4	5
5	Your mobile phone service provider provides un-interrupted network quality	1	2	3	4	5
Customer Support						
1	Your mobile phone service provider has Variety of customer support systems	1	2	3	4	5
2	Your mobile phone service provider has Speed of complaint processing	1	2	3	4	5
3	Your mobile phone service provider has Ease of reporting complaint	1	2	3	4	5

4	Your mobile phone service provider has Friendliness when reporting complaint	1	2	3	4	5
5	When you have problems, your mobile phone service provider is sympathetic and reassuring	1	2	3	4	5
Pricing Structure						
1	Your mobile phone service provider has Reasonability of price	1	2	3	4	5
2	Your mobile phone service provider has Variety of price schedule	1	2	3	4	5
3	Your mobile phone service provider has Possibility of freely choosing price schedules	1	2	3	4	5
4	Your mobile phone service provider Accuracy in billing	1	2	3	4	5

Section 3: Customer Satisfaction

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statements					
1	How much satisfied are you with your Network service provider?	1	2	3	4	5
2	Satisfaction related to Network service provider meets your expectations	1	2	3	4	5
3	Satisfaction related to Network service provider meets your expectations	1	2	3	4	5
4	Overall satisfaction with the services of the Network service provider	1	2	3	4	5
5	Overall satisfaction with the Network service provider	1	2	3	4	5

Section 4: Customer Loyalty

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statements					
1	Intention to stay with the current Network service provider	1	2	3	4	5
2	In future there are chances that you will carry-on your relationship with your Network service provider.	1	2	3	4	5
3	If people asked you, you would strongly recommend that they should deal with this Network service provider	1	2	3	4	5
4	Network service provider fulfils your needs most of the times	1	2	3	4	5
5	You never think to switch elsewhere even, when your Network service provider fails to meet your expectation	1	2	3	4	5

Section 5: Switching Barrier

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Statements					
1	Economic loss associated with switching	1	2	3	4	5
	Network service provider	1	2	3	4	5
2	Psychological burden associated with	1	2	3	4	5
	switching Network service provider	1	2	3	4	5
3	Alternative Network service provider reputation is better	1	2	3	4	5

4	Alternative Network service provider image is better	1	2	3	4	5
5	Trust toward Alternative Network service provider is more	1	2	3	4	5