IMPACT OF SERVICE QUALITY ON PATIENT SATISFACTION AND LOYALTY, TESTING A MODERATED-MEDIATION MODEL WITH PRICE, COMMUNICATION AND ACCESS AS MODERATORS AND PATIENT SATISFACTION AS MEDIATOR. (AN EMPIRICAL STUDY IN THE PRIVATE SECTOR HOSPITALS OF FAISALABAD)

By

Muhammad Shafiq

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Submitted By: **Muhammad Shafiq** **Registration #:** **229-MSBA/FSD/F16**

MSBA
Degree Name in Full

Business Administration
Name of Discipline

Mrs. Rakhshan Ummar
Name of Research Supervisor

Signature of Research Supervisor

Dr. Naveed Akhtar
Name of Dean FMS

Signature of Dean FMS

Brig. Muhammad Ibrahim
Name of Director General

Signature of Director General

Date

CANDIDATE DECLARATION FORM

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Son of **Asghar Ali**

Registration # **229-MSBA/FSD/F16**

Discipline **Business Administration**

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ABSTRACT

Thesis Title: Impact of Service Quality on Patient Satisfaction and Loyalty,

Testing a Moderated-Mediation Model with Price, Communication and Access as Moderators and Patient Satisfaction as Mediator. (An empirical study in the Private Sector Hospitals of Faisalabad)

The research was conducted to evaluate the impact of service quality on patient satisfaction and loyalty. The research was also intended to explore the mediating role of patient satisfaction and the moderating role of price, communication and access between the relationship of the service quality and patient satisfaction. The data was collected from the patients of the private hospitals located in Faisalabad. About 650 questionnaires were distributed out of which, 551 questionnaires were retrieved back. A convenience sampling technique was used to collect the data. The findings of the research suggested that the patient satisfaction significantly mediates the relationship between service quality and patient loyalty while, price (negatively significant), communication and access (positively significant) moderates the relationship existing between service quality and patient satisfaction. This study is a significant contribution in the domain of healthcare management and it has multiple implications at the managerial level, organizational level and academic level. The research also suggested the future directions for further research and can also be utilized for the future study for enhancement objective of service quality with the patient satisfaction with the mediating and moderating impact of some other factors to study the existing relationships between them.

Keywords: Service quality, Patient satisfaction, Patient loyalty, Price, Communication, Access to the healthcare facility

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God never spoils any efforts. I set my unfeigned and meek thanks before Him, Who is the only supreme authority and whose presence has been figured on the two words ¢Kun Faya Kun¢. Every tiny or massive entity moves with His permission. Countless thanks to Him, Who bestowed upon me the potential and ability to contribute a drop of material in the existing ocean of knowledge.

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Muhammad Shafiq

DEDICATION

I dedicate this thesis to my sweet mother and spouse. Without their patience, understanding, prayers, support and most of all love, the completion of this work would have not been possible.

CHAPTER 01

INTRODUCTION

1. Introduction

Moderators have a significant impact on the existing relationship between Service quality, patient satisfaction and loyalty. Although the role of moderators are established in the existing research yet, these moderators are introduced in the conceptual model of service quality, patient satisfaction and patient loyalty simultaneously to account for the changes in the existing relations. All the existing relationships between variables were hypothesized in the current context of the private hospitals. Data was collected and analyzed. It was concluded that the moderators have a significant impact on the existing relationship between Service quality, patient satisfaction and loyalty. It was also endorsed through the findings that mediator has a significant impact on the relationship existing between Service quality and patient loyalty.

1.1 Background of study

In the world economy services sector is appeared as the largest and fastest-growing sector, contributing the major share in total employment and output in the most developed countries. Kongsamut, et al. (2001) collected estimated data for about 123 countries for the period 1970-80 which indicated that per capita GDP of these economies rises with the increase in services given to the clients. The economies of these countries gradually shifted to more in the services sector from the agriculture sector and comparatively less in the industrial sector. Advanced nations are on similar routes by stepping up these activities to support their enterprises. East Asian nations, for example, Thailand and Singapore, have made an effective fascination for the wellbeing of their clients. Mostly from developing nations like India, Pakistan and Bangladesh patients go to these advanced countries periodically or regularly to attain the good quality medical services and treatment. It doesn't mean that these human services are not part or available in these countries or nations (i.e. Pakistan, Bangladesh and India) but, the standard of

their quality is very low or not up to the mark, rather most of the time, the grave issues related with service quality.

Their issues related to service quality are also abundant and widely endorsed in the West too. An analysis issued by the Institute of Medicine in the year 1999 subjected, to blunder is human: Building: a more secure wellbeing framework indicated that in the USA, around 98,000 individuals died due to mistakes in treatment every year (McDonald, 2013). Comparison of reports indicated in the Patient Safety reports, published in the journal that yearly, 210,000 to 400,000 patients died in the United States. This lack of doctor's facilities, their claim is due to insufficient preventable adverse occasions (Allen, 2013). The safety of patients is fully related to the security of drugs. Reactions of medication response expected is an essential part of value confirmation division in developed nations however, unluckily Pakistan has restricted responsibility framework for medicine prescriptions (Scurti et al. 2012; Rollins 2013).

It is advisable that a modern health system that gives excellent care has stream down impact on the personal satisfaction of the individual natives and the general financial advancement of the nation. One strategy which is applicable to the estimation of the nature of human services is buyers' appraisals of the desired services. (Nketiah-Amponsah and Hiemenz, 2009).

Since the twenty-first century, the topic of enhancing human services has received an expanding consideration. This developing significance has encouraged the vision to treat the patients as clients (Grönroos and Monthelie, 1988; Nordgren, 2008). As indicated by a few authors, human services associations got more prominent accomplishment by thinking about the patients/client's perspective (Gustavsson et al., 2016).

Service quality has happened to be a trendy expression in the present aggressive business environment because now it is considered as a basic element or factor for existence and business success in the competitive market (Parasuraman et al. (1985). The main theme/idea of service quality was instituted by Parasuraman et al. (1985) for service execution or performance evaluation; basically, it consists of five basic factors.

1.2 Service Quality

It may be considered as an evaluation of the client up to what extent an executed service fulfills customer's expectations. Service business providers often assess service quality provided to clients in order to uplift or maintain service standard, to quickly identify related complaints, and for better assessment of their customer satisfaction. A brief account of these factors is as follows:

1.2.1 Tangibility

In brief terms, something tangible can be touched, having volume and have an existence in the physical world, and something intangible having no volume, cannot be touched nor having an existence in the physical world. In the case of tangible services, customers develop their viewpoint about service quality by making a comparison with the services provided by others. The existing appearance of the personnel, communication, currently available facilities, materials and equipment is of vital importance. The physical indication refers to the environment in which services are executed or delivered and organization or firm and their customer or clients' associate, furthermore any other tangible commodities that encourage execution or dealing of these services (Zeithaml and Bitner, 1996). Tangibles include physical facilities, equipment or tools to be used in providing these types of services also Staff, as included in the comforts, indications, accesses, functionality, openness and neatness (Cunha and Suresh, 2015). Service element depends on their key aspect for enhancement and execution of quality services in this sector (Rad et al., 2010). Furthermore, it can be correlated and integrated with the other assorted variety of services to fulfill customers or client desires (Caruana and Berthon, 2002).

1.2.2 Reliability

It indicates or shows the ability to execute the committed and assured services consistently and perfectly. It means that the organization fulfills its commitments about service executions, problem resolutions, provision of services, and their pricing. Client's tradable services with organizations that kept them tagged with their commitments. Especially their commitments about the core attributes and outcomes of provided services. The organizations need to have awareness about their client needs and desires in

this respect. If the organizations fail to fulfill their basic services to the clients, they consider them fail in gaining most of the benefits coming in this way. This includes service reliability and regularity, which enables them to execute the services in the right way as per customer demand (Parasuraman et al., 1985). Service providers give the best possible service in real-time their commitments, especially bookkeeping, accuracy in billing and execution of the services as per agreed terms and time frame (Kondasani and Panda, 2015). If the firms proving services fulfill all its commitments, then the satisfaction level of the customer enhances and their confidence in the organization will also uplift because this has improved their consistency and efficiency to meet client needs and demands (Rad et al., 2010).

1.2.3 Responsiveness

Responsiveness can be explained as readiness to accommodate the customers and provide quick services to customers. This factor focuses on promptness, attentiveness and efficiency in managing with the client's questions, desires, grievances and issues. It is conveyed to the clients by taking a margin of such time they were on waiting for guidance, the reply of their queries or addressing their issues. It can also capture the signal of ability, flexibility and the process to modify the services to fulfill the needs and desires of clients. Service provider concerns its ability or willingness to give swift services (Parasuraman et al., 1985). It ranges with a period, such as the provision of rapid services to their customers, setting-up early appointments, immediate execution of the services to avoid incorrect organizational image and calling the clients at his earliest (Calisir et al., 2014). If service vendors raise responses to their clients, then it can have a good impact or impression on the gained satisfaction level of their customers (Parasuraman et al., 1985; Rad et al., 2010).

1.2.4 Assurance

Assurance means to give motivation to the level of confidence and trust. It is described as courtesy level, professional competency of the staff and potential of the firm to stimulate confidence and trust. This factor is expected to be very important for the clients' desire for their expected services in which they have high involvement, have not too much clarity about it and have less potential to analyze it. Factors of confidence and trust may

be found in the employee who has close contact with the client of the organization. Thus, the staff has a good command on the significance of the development of the client's trust and confidence to take the competitive edge of customer's loyalty with their organization. Service assurance may be the professional skills, knowledge and courtesy level of the employees with their potential, capability and competency to inspire their client's level of trust and confidence (Parasuraman et al., 1988). Assurance was elaborated or discussed as the professional knowledge, skills and staff courteous manners with their ability or competency to inspire the trust and confidence level of their customers (Zeithaml et al., 2006).

Andaleeb and Conway (2006) explored that quality of the service and its assurance may not be of vital importance in other sectors while in service sector risk factor may be very high after the use of uncertain services. In this way, it is a vital factor for the healthcare and medical organizations that patients look into evaluating the medical facility and medical staff. It also refers to employee skills, expertise, manners and capabilities to build a high level of trust, confidence and take necessary steps for the best interests of their customers (Kitapci et al. 2014). In this respect, service assurance might also be helpful to eradicate the roots or sources of uncertainty (Izogo, 2015a).

1.2.5 Empathy

It offers an environment of personal attention and consideration of the facility which is given to their clients. In some states, this is considered necessary to give personal care to recognize the clients that the organization was doing their best for the satisfaction of his desires. It can be an extra edge that the confidence, trust and client's level of loyalty uplifts from the same perspective. In this world of high competition, the client's desires and demands are growing regularly and now, it is the duty of the organizations to make the utmost efforts to fulfill the desires of their clients. Otherwise, the clients who do not receive proper personal attention will work out somewhere else. Empathy refers to get desired data regarding customer requirements, special attention to resolve issues and responding to their raised queries (Parasuraman et al. 1985). Empathy of service provider along with their health affiliation with the customer's impact on the satisfaction of clients was a significant (Fitzpatrick, 1991; Zarei et al., 2012).

The existing association lying between service quality, client satisfaction and consumer loyalty has received reasonable institutional focus in the last few years. But the exact relationship existing between the satisfaction of the client, their loyalty and the quality of the provided services, (especially in this respect all the three concepts have been taken into consideration) is still covered with the fact of uncertainty. Many analysts have considered customer satisfaction and loyalty by taking a single item scales for measurement and many others they have used several item scales for measuring. Different researcher adopts different viewpoints and instruments to capture the satisfaction of the customer and their loyalty as a multidimensional concept just like service quality, but their opinion is to work out client satisfaction and client's loyalty in a systemically sequence, in which service quality is measured or considered. Keeping in view this idea, the relationship existing between service quality, client satisfaction and client's loyalty has been explored. It was supported by the results that three factors are in fact independent but closely correlated with each other, suggesting that a decrease or increase in one factor is likely to show the same decrease or increase in others. Researchers are taking a keen interest in finding out the relationship existing between the satisfaction of the client and their loyalty and the provided quality of the services, courteous words, expenses incurred and organizational profits (Shi et al., 2014; Orel and Kara, 2014). Most of the researchers drawn out that impact of service quality and its performance analysis on the satisfaction of the client and loyalty of the customer in healthcare facilities or sector was positive (Shabbir et al., 2016; Park et al., 2016).

Major outcomes desired from research were to draw out the authenticity of the relationship existing between client satisfaction, loyalty of the customer and service quality provided to them in the Pakistan private sector healthcare facilities keeping in view the impact of price, communication and access and to find out the service provider's fulfillment of the prevailed standards of the healthcare sector, quality of the service, loyalty of the patient and their satisfaction established on the demographics of the customers (age, gender, income level, marital status and type of healthcare facility). As per Parasuraman et al. (1988), service quality provided indicates the observed quality of the product, which impacts the customer assessment of the overall facility's distinction.

They also pointed out the fact that if the organization consistently meets the consumer's external and internal observations regarding service quality to fulfill their individual needs. Service quality is also an extra edge to meet the mutual results as defined by both parties regarding the services and standards (service provider and clients) (Dedeke, 2003). It includes factors such as issues of technical service quality, which shows the practical execution that the customer gains in the service agreement; and the functions of the service quality, related to the particular assessment of how the services are executed. It also elaborated on the client's correlations during the service execution process (Gronroos, 1990). Good service quality results in higher client satisfaction as expressed by (Subramanian et al., 2014). To attain a higher level of client satisfaction, management of the service provider organization must be anxious for four basic service features (intangibility, perishability, inseparability and heterogeneity) while the execution and performance of their services (Kotler et al., 2006).

As per the findings of Gummesson (1992), the concept of service quality varies in service firms and producing institutions. The service managers are believers that with the production of quality product the results of better service quality can be achieved. Service providers are aware of that execution of service quality is comparatively tough as compared to the quality of product and same for its measurement because of its intangibility while, in products the quality is tangible, measurable and inspection is possible to avoid deficiency or defects which are the indications of low quality (Buyukozkan et al., 2011).

1.2.6 Healthcare Service Quality

This is a vital and key aspect for existence, survival and expansion of human capital for the nation in the modern era and changing facts of the world communal development. The healthcare sector in this respect has given vital weight because it targets the security, renovation and aids to intellectual, physical and societal welfare of the population. From the psychological viewpoint, the need to attain healthcare, as per Maslow theory of humanistic (Maslow, 1943), describes the requirements of security, which is found at the initial level of the hierarchy of needs from that only one level up of this the need for the physiological satisfaction of the human beings.

A well-recognized, familiar definition of quality as elaborated by Berry et al. (1988) fulfillment the provisions, but still, they are claiming for the enhancement of this definition for quality of the service, conformance to client or customer specification it is the client's definition of quality, not the organization's that counts. With the inauguration of a variety of services and their types, the consumer's desire and demand also grows gradually. Consumers mostly depend on their surroundings about the availability of a product, attained satisfaction and cost aspects. Customers take awareness through publicity which makes them consume their disposable earnings. Additionally, they had become more dependent on the desired services.

Due to the availability of improper and inadequate managerial skills, labor expertise, professional competencies, high turnover of staff and lacking proper technologies make this industry flop in order to meet the desires of clients. As competitors in the market go on increasing day by day, the execution of proper service in time became very important and vital. As attached with respect to the initial level of satisfaction of the customer as price of service, personality of the customer and its existing situation (Natalisa and Subroto 1998), it also takes a vital part in advertising since it lies within the organization of the service provider, and within its enhancement, satisfaction of the client will also be uplifted through advertisement and customer incentives consequently, in its return will affect the aim of the customer to take the provided facilities. Brady and Cronin, (2001) explained the different factors of the service quality, its surrounding environment, desired quality and attained results of quality. Their study on service quality advocated the organizational correlation of staff which has the leading role in the observation of patients about service quality.

Choi et al. (2004) established an integrated model of healthcare clients' satisfaction based on the three important factors; service quality of the product, price, patient satisfaction gained and attitudinal purpose. Service quality appeared vital than the price paid in satisfaction of the patient. Raftopoulos (2005) pointed out that food, medical care, caring of the nursing staff, room features and their treatment has a key impact on service quality. Zineldine (2006) confirmed that the patient's satisfaction was a collective target, infrastructure, technical aspects, functional flow, communication and environment.

Elleuch (2008) assessed patient satisfaction underuse of processing features (patient and service provider mutual relations) and physical features (site and display). Quality of the process and its characteristics were backgrounds to patient satisfaction, which in response indicated the patient's intentions to come back to the medical facility or to refer someone. Baalbaki et al. (2008) in their research recorded that supporting utilities such as staff dealings impact patient's observation of services. Duggirala et al. (2008) have expressed seven factors of patient supposed healthcare quality: internal structure, clinical care process, staff quality, administrative measures, safety measures vitals, the overall impact of healthcare services gained and their self-concern. Service quality supports medical services providers to find out the drawbacks between service execution and patient prospects (Al-Borie and Sheikh Damanhouri, 2013; Zarei et al., 2015).

As a matter of fact, when the suppliers of the service find out their service-related issues they can take steps for the betterment of quality performance for their prompt advantage (Kondasani and Panda, 2015). As per Buyukozkan et al. (2011), quality of the healthcare service can be observed in (06) six means: tangibility, responsiveness, assurance, reliability, empathy and professional skills of the staff. The researchers also find out that professional experience and consistency are equally of key importance for the performance of healthcare service quality. Butt and Run (2010) investigated Malaysian private medical health quality of the service. They find out service quality flaws between its prospects and its observations in the Malaysian private medical services sector. They pointed out that service observations are much higher than of the prospective of the service in the private sector hospitals of Malaysia.

Andaleeb (2001) narrated, that there was no need to measure SERVQUAL factors in a particular service situation. He projected that if quality factors are changed to find out specific service conditions. In 2001, he considered service quality observations and patient satisfaction in the healthcare sector of Bangladesh. He recommended five factors: assurance, discipline, responsiveness, communication and service tips (baksheesh) to find outpatient satisfaction. His study results showed that all factors of SERVQUAL had a positive impact on the satisfaction attained by their patients. Manaf and Nooi, (2009) studied service quality in Malaysian public hospitals and their effects on the satisfaction

of the patient. Patient satisfaction was measured on the basis of the lab (employees, information and treatment) and physical (cleaning, visiting and environment) elements. Both elements had a significant impact on patient satisfaction in Malaysian public sector hospitals. Services quality has a persistent impact on many other variables i.e. patient satisfaction, patient loyalty, welfare and pleasantness etc.

1.2.7 Patient Satisfaction

Nowadays patient satisfaction from the healthcare facility has taken as the key factor to measure its quality, meanwhile, patient satisfaction is considered as a projected integrated factor of a medical organization and the whole of the healthcare facility. From the inexpensive and advertising viewpoint it is an interpreter of customer requests to repeat the services of patients for healthcare in the given facility. Studies about the satisfaction of the treatment allow developing a plan of the healthcare concern to evaluate the acceptance of patient care plans, their actions and their concerned centers in their arrangement along with their physicians. Furthermore, research on patient satisfaction of health care services, finding out the reasons of non-satisfaction and its influences impacting it, along with its checking and assuring the satisfaction of the patient to uplifts the caring quality of the patients.

Factors of dissatisfaction might depend on a firm or either a service receiver. The basic factor depends on healthcare firms: discontent with the firm processes (working hours of the firm and employee queue, shortfall of employees), the break of ethics by medical staff, disobeying the procedures of treatment and testing, deficiency of professional skills, poor input and technical footings. The second issue is due to the patient; unjustified desires and needs for medical staff, not following the doctor's directions (as a result, proper outcome of the treatment not attained). Therefore, managing a market study to evaluate patients' prospects of healthcare is critically vital to recognize the prospects of the patients. The service quality and client satisfaction are absolutely the two major factors that are the core of its theoretical and practical advertising aspects.

In this environment of high competition to give higher quality product organizations would have a supportable edge over its competitors which in return will result in satisfied

clients. Serving clients and giving a high level of satisfaction to them had targeted out as the aim of modern promotion and advertising philosophy (Mishra, 2010). Patient satisfaction is the most desired result of lab care in healthcare institutions and can even be an indicator of health position itself. The physical appearance of the patient's satisfaction is a finding on the quality of hospital care in its key elements. Research on the patient satisfaction concluded how consultants feature (like physician's communication and professional skills) or impacts of caring (e.g. accessibility, steadiness, etc.) had a vital impact on the satisfaction of the patient with doctor and healthcare (O'Connor and Shewchuk , 2003).

Customer satisfaction, which is the variance of the perception between pre prospects and post-execution of the service drives them for the availing of same or different services in future from these type of medical facilities (Sardana, 2003). Auh and Johnson (2005) elaborated client satisfaction as a process of client's purchasing and after utilization findings. Many elements apart from technical facts of healthcare services attained had found to touch patients' observations of caring quality and patients satisfaction (Sofaer and Firminger, 2005). Information on the inspiration that NPS (Non-Physician Staff) might have the satisfaction of the patient can have considerable implications for the care of primary aspects for the service providers. Though current research recommends that it might be very tough to change consultant attitudes, rather than less tough to change Non-Physician Staff norms and approaches (Braunsberger and Gates, 2002; Rider and Perrin, 2002).

1.2.8 Patient Loyalty

Search for new patients is an ongoing contest for the doctors and healthcare service providers, but perhaps the greater task, with long term rewards is the ongoing effort to build trust, confidence and loyalty with the existing patients. There are several approaches to engage healthcare consumers and increase patient loyalty. Oliver (1997) elaborated patient loyalty as an extremely demanding objective to come for reutilizing the desired product and for regular and future attachment, irrespective of routine situations and promotional factors with the view of having the expectations to encourage switching actions. It is related to the possibility of a customer to come for repurchase, giving strong

words of mouth positions and promotions strategy, and make trade referred, (Bowen&Shoemaker, 1998), which creates valuable impacts of finance (Duffy, 2003).

Patient loyalty is a patient's consensus to come for repurchase from the healthcare facility. A healthcare service facility that could take steps and retain its loyalty of the patient will attain much of the business and financial aids, such as rise in income of the organization and positive conversation (Mittal and Lassar, 1998; Zeithaml et al., 2008; Chang et al., 2013). In this regard, relationship advertising investigators had exposed that patient loyalty, is a key and vital concept in a competitive trade environment (Morgan and Hunt, 1994; Bruhn, 2002, Palmatier et al., 2006). In the meantime, it is renowned that the service of the healthcare sector has become a reasonable sector to explore in-depth (Chang et al., 2013).

Therefore, the healthcare service sector would have to manage their patient loyalty, efficiently and excellently. Higher satisfaction of the consumer has many more benefits, such as better loyalty of the customer; it uplifts organizations goodwill, less elastic price, cut down costs of future concerns or business and increased staff productivity for their concerns (Chan et al., 2003). A satisfied client is proved to be a solid factor, for uplifting the loyalty of the customer and strong long-run business relationships, which in return will be fruitful to provide an extra advantage in the shape of more trust in the services, confidence on the provider of the service, their dedication etc.

1.3 Moderator Variable

1.3.1 Price

Naidu et al. (2007) has studied price as dimension of patient satisfaction and in this study moderating impact of price analyzed. It is the value that is given to a product or service and is the result of a composite set of investigation, calculations, understanding and the risk-taking aptitude. A pricing tactic takes into account sections, market, conditions, the capability to pay, competitor activities, trade limitations and input, costs, between others. It is a value that can buy a certain mass, quantity or another measure of goods or services. Dabholkar et al. (1996) describe that customers regularly analyze the price list of the product as a satisfaction factor. Price is one of the important trade factors by which firms

can work out some points to control market practices. It is an illegal violation to operate prices (as in price fixation process) in consent with market partners and to circulate false prices such as overheads which are reasonably assumed to be considered in the publicized price list. It is conveyed as a product sale price.

Scitovsky (1945), studied that price may be a pointer of the quality simply proposes that price can also convey product demand relevant quality-related evidence or information of the supply. A high priced product may give the signal of either a highly demanded product or a highly costing production product, integrated with that of a high-quality product. To find out either this assumption is fair, the different investigator used some "unbiased" standards to analyze whether adopting high priced techniques are for high quality than the low-quality product at less priced decisions (Riesz, 1978; Sproles, 1977).

Pricing of services has given minor attention as associated with product pricing. As a share of the service sector and its importance is increasing day by day in the economy and become a major profit generating source for many organizations. In this scenario, a need to understand the price of service is produced (Docters et al., 2004). They said the client satisfaction studies give consideration to the factor of price, price observations and satisfaction of the client. Hø´st and Knie Andersen (2004) stated a positive association existing between supposed competition and client satisfaction.

1.3.2 Communication

Naidu et al. (2007) has used communication as dimension of patient satisfaction and in this study moderating impact of communication observed. It is a two-way communication procedure of reaching shared considerate, with which contributors not only talked (encoding-decoding) news, thoughts, their data and observations but also make sharing of its derived meaning too. Normally, the conversation is the source of linking peoples or distant places. In a commercial era, it has become a vital part of the administrator's role and without its proper functioning; the operation of an organization will be on the horn of dilemma if there is no proper communication between sections and different staff levels. The goal of communication is to share information and its understanding from one level

to another level. This communication process is a combination of three basic parts: In this process, the sender initiates the message and transmits it to the receiver a message through a channel.

Effective consultant and staff conversation with patient is the basis of sympathetic and capable of the services of the healthcare and a vital part of the high standard of medical-related services, its quality and patient satisfaction (Kaplan et al., 1989; Levinson et al., 2010; Levinson and Pizzo, 2011; Swenson et al., 2004). Effective consultant doctor conversation supports the patients in the understanding of their health complaints actively required information from patients, and any other available sources to collect more information to make better treatment decisions. It is a factor of key importance in the control and treatment of chronic conditions since it takes more significant or considerable responsibility of the patient in self-treatment (Mercieca et al., 2014). If this process is smooth, which involves sharing of the information between the service providers to the patient or service receiver in respect of the healthcare issue he receives, thereby it will improve the existing uncertainty that will ultimately increase his awareness and sensitivity about what he is expecting, then the satisfaction of the patient will be at its higher level (Andaleeb, 1988).

There is a well-organized relationship existing between communication skills of the consultant and the patient satisfaction level with those healthcare services which doctors provide (Ong et al., 1995; Little et al., 2001). Levinson et al. find out that a particular attitude of the communication resulted in claims but not in no claims basic healthcare provided by the doctor (Levinson et al., 1997). Dissatisfaction levels of patients can clearly express the deficiency of communication skills of the consultant by complaining it or even become the cause of the litigation (Levinson et al., 1997; White et al., 2005). Constructive skills of communication of the consultant have been shown as the patients' perceptions about his competency (Kim et al., 2004; Moore et al., 2000) and also to decrease the ratio of the complaining purpose (Moore et al., 2000). It is processed by which under treatment patient is kept updated through easy and understandable medical terms during the time of consultation and also shared psychological and non-technical information with the patient (Tucker, 2002).

Care of consultants is a vital and key factor of attained patient satisfaction. It consists of the initial process of analyzing the illness and gives proper suitable healthcare treatment to under-treatment patients. The factors guiding to the consultant care consists of a doctor's friendly attitude, communications with the staff nurses, conversation with the supporting staff, on-time availability, give timely suitable treatment. (Sardana, 2003; Chahal and Sharma, 2004). Consultant caring attitude would be very helpful for the consultants in the understanding of the problem of their patient, healthcare history, his demographics, disease type. Furthermore, it will be helpful and important at the emergency time for rapid healthcare treatment or perception. A doctor's strong communication skills and experience are strongly interconnected with patient satisfaction (Kim et al., 2004). Peoples are a vital part of healthcare institutions concerning constructing good interactions with their customers of healthcare services. Good internal communications are the basic requirement for healthcare service quality, as well as for the development of good repute in the public sector (Swayne et al., 2006).

Poor communication of the doctor often resulted in diagnostic mistakes for common conditions and other infections (Singh, 2010) and also exposed the safety of the patient (Manias, 2010). The objective of consultant patient conversation had been extended to consider not more than a conversation of the existing healthcare problems; it expresses the development of personal relationships existing between consulting physicians and under treatment patients (Lezzoni et al., 2012).

1.3.3 Access

Naidu et al. (2007) has studied access as dimension of patient satisfaction and in this study moderating impact of access studied. The facilitative access is the basic need and desired with the serving people to provide appropriate healthcare facility to maintain their health. Access to a health facility is a complicated perception and at least four factors in this regard require proper consideration. If desired services along with its adequate supply are available, then there is a chance to obtain the desired healthcare services and peoples might have accesses to the facility of services. This level to which people gain access also depends on the demographic obstacles that restrict them to use these available services. In this way, it is evaluated in terms of their consumptions which might be

dependent on the capability, physical convenience and suitability of the available services. Available services must be inlined with and operative if the people have easy access to gain satisfactory healthcare results. The service availability and resources to access these services have to be accounted for in this perspective of the varying viewpoints and various aspects. Access equity might be evaluated in the terms of its utilization, availability or results of these services. Both utilization and availability factors vertical and horizontal need proper attention.

Access to the healthcare facility means having easy and in time use of individual healthcare services to attain the best healthcare results (IOM, 1993) having easy access to healthcare required three distinct steps: easy approach/entry to the healthcare system. Get easy approach/access to healthcare sites where the patients can take desired medical services. Access, as the procedure of caring, is the convenience, obtainability and accommodation regarding healthcare services, when they are willing to avail of these services. It is refined by process as a number of the patient consultant contacts (Turner and Pol, 1995), their time of waiting and ease (Bowers et. al., 1994; Hall and Press, 1996; Levis, 1994; Hopton et. al., 1993), and reliability and availability (Handler et. al., 1998; Mckinley et. al., 1997) correlated with healthcare experiences (Hall and Dornan, 1988; Piette, 1999; Ross et. al., 1993). Their ease of time of Waiting and obtainability integrated with healthcare involvements (Tucker, 2002).

Narang and Sharma (2011) also investigated gender differences and the way to approach the healthcare facilities. They pointed out that for the delivery of healthcare services and monetary aspects and access to a healthcare facility, this might have a significant positive impact on its prospective among men. While among women, it was the delivery of the healthcare and healthcare personnel's dealing and required drug availability which was important for patient satisfaction. This factor was reproduced in the investigation findings. While on the other hand, women were found to be sensitive, expecting empathy and sympathy at the place of treatment or health facility from the service providers.

1.4 Research Questions

The question of research might be an answerable query into an exact issue or concern. Research questions are the first step taken in an investigation project. The first step means after that you had a certain awareness of what you are investigating, it is the initial important step taken in the exploration processes. These questions of investigation provide the origin of where we want to go, so we have to arrange or plan good study questions.

Research Question 1

What is the existing relationship between service quality and patient satisfaction?

Research Question 2

What is the existing relationship between service quality and patient loyalty?

Research Question 3

What is the existing relationship between patient satisfaction and patient's loyalty?

Research Question 4

Does patient satisfaction mediate the relationship existing between service quality and patient loyalty?

Research Question 5

Does price moderates the relationship existing between service quality and patient satisfaction in such a way that when the price is low patient satisfaction is high and when the price is high patient satisfaction is low?

Research Question 6

Does patient and doctor communication moderates the relationship existing between service quality and patient satisfaction in such a way that when communication is

effective patient satisfaction is high and when communication is ineffective patient satisfaction is low?

Research Question 7

Does access to hospital/medical facility moderates the relationship existing between service quality and patient satisfaction in such a way that when access is easy patient satisfaction is high and patient satisfaction is low when access is hard?

1.5 Research Objectives

Generally, investigation purposes describe or elaborate on what we are expecting the plan to attain by the project. Its purposes are usually elaborated in lay terms, conditions and are recommended as much to the customers as to the researchers. The purpose of the research is associated as well as interlinked with a hypothesis of the study. A critical component of a successful research engagement is the set of clearly defined and expressive purposes. The purpose of research conducted drives all elements of the procedure, including a collection of the data, instrument design, its analysis, and ultimately the recommendations and references.

The major objective of research for the investigator is desired / favorable results at the end of the study process.

Following are the major objectives of the research:-

1. To analyze the existing relationship between service quality and patient satisfaction.
2. To test the existing relationship between service quality and patient loyalty.
3. To test the existing relationship between patient satisfaction and patient loyalty.
4. To test that the relationship existing between service quality and patient loyalty is mediated by patient satisfaction.
5. To analyze the existing relationship between service quality and patient satisfaction at a low and high price.

6. To test the existing relationship between service quality and patient satisfaction at effective and ineffective communication.
7. To test the existing relationship between service quality and patient satisfaction at easy and hard accesses.

1.6 Problem Statement

As reported by WHO in 2012, Pakistan's total expenditure on the healthcare sector of both the public and private sectors was 2.8 percent of its total GDP. Pakistan graded at a lower level in the area in its investment in the healthcare (for analysis: Afghanistan 8.5, Iran 6.6, China 5.4 and India 3.8 percent of its total budget) (WHO, 2015). As per the current analysis, public healthcare expenditure of Pakistan is unluckily 0.9 percent of its total GDP; ranking Pakistan in the list of three worst world countries (World Bank, 20I6b; Malkani, 2016). This factor compels Pakistani peoples to take or avail healthcare facilities of private sector primarily out of their pocket money expenses (Malkani, 2016) and, therefore, about 75 percent of the Pakistani peoples avail private sector healthcare services (Hafeez, 2014). Pakistan is also in the list of these last three countries in which polioviruses are still prevalent in the world (WHO, 2015).

According to the latest available data of the statistics of the World Bank, in 2014, Pakistan's health expenses per capita were US$36. After making a comparison with its neighbor countries keeping in view per capita healthcare expenditure, for a similar period, gives a very miserable picture (World Bank, 2016a). Furthermore, as per WHO (2015) report, infant mortality ratio is 69 per 1,000 live births in Pakistan, which almost close to Afghanistan (70.2) but far behind from all other neighboring countries, that was, China (10.9), Iran (14.4) and India (41.4).

These statistical facts make Pakistan the worst country as compared to the other developing countries where their investment in the sector of healthcare is also miserable or low. Even as per Shabbir et al. (2016), in comparison with different countries, Pakistan has devised a certain mechanism to improve their healthcare services sector quality, in recent research, through its review of the literature and outcomes, disproves this confusion. Hafeez (2014), in his investigation, related deficiency and bad performance in

the healthcare sector of Pakistan and disclosed how the scarcity of resources gives rise to insufficient healthcare facilities and vice versa. Another issue of gaining increasing attention is corruption and dishonesty in the sector of the healthcare Gadit (2011). These facts and figure of the healthcare sector of Pakistan assign lowest levels of grade in various world statics related to healthcare. Yousafzai (2015) explores it to be one of the worst-performing sectors of the healthcare of the world that are not tough to recognize or observe.

The welfare of the households can be analyzed by the health, education and food factors (Linnemayret al., 2008). Pakistan is one of the most populous top ten countries of the world with a 195 million population, with a high growth rate of 1.89. Probability of females and males life is 68 and 66 respectively, which seems to be static during the last three years which indicating the bad condition of the healthcare sector. (GOP, 2016). Healthcare issues are among the key prevailing issues in Pakistan. A proper system of healthcare for the peoples including kids, men and women is not properly designed and available in Pakistan. There is a deficiency of the resources; people do not have enough resources for feeding their families and to meet livelihood expenses. Despite these bad situations of health and education in Pakistan, the government is incapable to allot proper funds (not more than 2.1% to education and 0.45 %) to the health sector of the total budget. (GOP, 2016).

Service quality of the product is taken as an independent variable. Patient satisfaction and loyalty are used are dependent variables. The relationship existing between service quality, patient satisfaction and patient loyalty will be investigated. Furthermore, the variance in the association existing between service quality and patient satisfaction at different price levels, at effective and ineffective patient-doctor communication and at easy and hard access to healthcare center will also be observed in selected private hospitals of Faisalabad. This study would address the long-held gap of exploration of health services in both private and public sector hospitals in the vicinity of Faisalabad to unfold the condition of their satisfaction and long term relation with the service provisions.

1.7 Scope of Study

It considers all those aspects that will be under discussion in the research project. It elaborates the extent of content that will be discussed by the means of the research project to draw out more logical results and give conclusive and justified /satisfactory answers to the research.

This study will provide a new dimension for the researchers in the area of healthcare to study the association existing in the service quality and patient satisfaction. This study will provide a better understanding of the Service providers, how various constructs and variables affect the overall quality of the service. This study will open a new dimension for the researchers by initiating a discussion on the moderating role of the service price, communication and access between service quality and patient satisfaction. It will also be helpful to conclude the existing relationship between service qualities and patient's loyalty keeping in view the role of the service price, patient-doctor communication and access to hospital/medical facility.

1.8 Significance of Study

It should reflect the degree up to what extent this study has contributed to enhancing/uplift our understanding, to change a viewpoint or concept to promote a new hypothesis in this particular domain of research.

The present research study can be utilized by the social scientists for residing upon those social factors which moderate negatively or positivity the relationship of service quality, patient satisfaction and patient's loyalty. The investigations would also be utilized for the future study in enhancement objective for sponsors of the tasks to consider the feasible sketch of service quality with the patient's satisfaction with the mediating and moderating impact of other factors to find out the relationship or impact of some other factors.

This study will be a valuable addition in the domain of the healthcare sector, especially in the area of service quality, patient satisfaction and patient's loyalty, with a description of the existing association between them. Furthermore, this study would be helpful to evaluate the association existing between service quality and patient satisfaction with

moderating impact of the price (high and low price), communication (effective and ineffective communication) and access to the healthcare facility (easy and hard access).

This study has many managerial implications for the healthcare organization especially in Pakistan and for the organizations of other developing countries where people have not too much awareness about the service quality. This study offers a comprehensive and concise statement about the service quality, its different aspects, its relationship with patient satisfaction and patient's loyalty. The research may also elaborate on the degree of change in association of the service quality and patient satisfaction, at different price levels (high & low), at different communication levels (effective & ineffective communications) and access to the facility (easy & hard access).

This research/study may also be helpful for organizations or managers to make better decisions for the proper utilization of their available resources. That will enable them to maximize their profitability by enhancing the service quality keeping in view the patient satisfaction and patient's loyalty with the moderating impact of the price of services, communications/proper guidance to the patients and access to the medical facility/hospital.

In this globalized economy, the study can be helpful for the customers/patients to evaluate the other healthcare practices to maximize their satisfaction from the investment of their limited available resources. This study will suit best in the developing countries' where the peoples are very conscious about the cost or price of the desired healthcare or other services. In this regard, this study will be feasible for the service users for the comparison purpose among the standards of the healthcare organizations.

This study will also be beneficial or feasible for the customers/patients to make a comparison between the offered services of various healthcare facilities keeping in view the factors of cost/price, communication and access to the healthcare facility.

1.9 Research Gap

Much of service quality performance analysis concludes that quality of the service has a positive impact on patient satisfaction and patient loyalty in the healthcare sector

(Shabbir et al., 2016; Park et al., 2016). The significant impact of service quality on patient satisfaction and patient's loyalty in the healthcare domain has already been studied by the researchers. In most of these studies, some important factors/aspects like cost/price of service (keeping view patient income/affordability/purchasing power etc.) have not been addressed adequately. Pantouvakis and Bouranta, (2014) explored that empirical, statistical and qualitative evidence clearly showed that the client's satisfaction found and service quality are multi-functional variables or constructs, whose contents of quality, along with accessibility and cost, impact the client's overall satisfaction, patient-doctor communication as also work investigations as factors which can moderate existing relationship (key factor in diagnosing disease and its appropriate medication to coup up the problem)

Trumble et al. (2006) Patient's satisfaction as proved by the analysis consultant's communication with competencies is a vital factor to shift the patient to complete satisfaction and overall satisfaction with the medical necessities and access/location of hospital/medical facility (geographical access, transport availability and generally familiar area make it easy to reach) Owusu-Frimpong et al., (2010) explored the result drawn out from various access experiences of public and private healthcare user. The public and private users of the healthcare point out the main issues in accessing healthcare facilities. In fact issue of access to the healthcare facility is of key importance and needs to be considered by management and the concerned officials and healthcare service providers to improve the service quality along with the patient satisfaction and delivery of the services. Users of private healthcare facilities feel better than that of public healthcare sector users in attaining healthcare services in a short period of time, due to the extended working hours and getting appointments for medical treatment with less inconvenience, are not considered in these studies. These issues of access have not been addressed in the local context before. The combined effect of moderated mediation as proposed in the study up to my knowledge has not been accounted for in Pakistan.

1.10 Supporting Theories

1.10.1 Theory of Expectancy

This theory of expectancy (or motivation theory) expresses that the performance or attitude of a person will be in the specific direction because of their motivation to select a specific attitude or behavior over and above all the other behaviors due to the expectation of the outcome of that specific/selected behavior will be executed by them. In short, the selected attitude or behavior motivation is considered / expressed by the requirement of the specific / desired / result. However, the cognitive theory has provided a solid base for the understanding of the process, how a person acts at the various factors of motivation. This is performed before taking the final choice. The results are not the only factor to be considered for decision making how to act or execute.

This theory also expressed the human brain functions and procedures with respect to the selections/alternative, or choices. It also explains the procedures by which a person faces while, choosing among the alternatives. In the process of investigation of a firm, this theory is based on the theory of motivation, as proposed by (Vroom, V. H. 1964).

This theory focuses on the desires / wants for firms to interlink / integrate rewards with performance and give surety that the compensations awarded are the rewards that are expected by the receivers/service providers.

Vroom, V. H. (1964) explains that motivation is a process of choosing among various available alternatives of ventures, a system under the supervision of the concerned person. These people choose to keep in view their working and estimate up to what extent they are expecting the desired results of a given attitude are compared with their desired/expected results. Motivation is an output of expectancy of an individual that a creative effort in the specific domain will result in considered achievement, this performance of this instrumentality is to achieve a specific desired outcome, and the desire of this expected/desired outcome for an individual termed as valence factor.

This theory explores as well as expresses the procedure or factors why people give preference to one behavior or option over the others. It also expresses that a person might

be encouraged in attaining the targets if they are expecting that there is a positive relationship existing between struggle and the executions, attained result of a fruitful executions will result in the desired output, a performance return will satisfy his key wants/desire, and/or the results satisfy their needs or wants. He inducted (03) three constructs of variables within this theory which comprises of valence (V), expectancy (E) and instrumentality (I).

These (03) three factors are of vital importance element behind the process of the selection process of a factor over another factor because this theory has elaborated: effort performance expectancy (E>P expectancy), performance-outcome expectancy (P>O expectancy).

This expectancy theory has three main components: expectancy, instrumentality, and valence.

Expectancy: effort → performance (E→P)	SERVQUAL
Instrumentality: performance → outcome (P→O)	Satisfaction /Loyalty
Valence: V(R) outcome → reward	Satisfaction /Loyalty

1.10.2 Vroom's Expectancy Theory

The attitudes or behaviors resulted in the sensible selections among the available choices, whose objective is to optimize the contentment and diminish discomfort /dissatisfaction is the basic theme on which this theory-based. He explained that the association existing between the attitude of the people at the job place and the targeted goal was not as easy or simple as was assumed by other investigators.

1.10.3 Theory of Reciprocity (social psychology)

This theory states that in social psychology, reciprocity is a social attitude of giving a positive response with another positive action, resulting in kind behavior/actions. As a social factor, it means that in response to positive action, people are frequently much more cooperative and nicer than explored by the self-interest model; conversely, they are frequently much more offensive and even brutal in response to rude/hostile actions.

Theory of the reciprocity has made it possible to build everlasting relationships and exchanges. He states that if capitalism and democracy institutions are to work in the true sense, ultimately they must prevail within specific cultural habits that will ensure their up to mark routine function which operates that the individuals who provide the service providers are motivated by valence to get the reward of satisfaction and loyalty through their expectations. He goes on to say contract, Law, and economic rationality and their prosperity along with leavened with reciprocity, trust, moral matter and their assigned assignments toward society. According to the sociologist Gouldner (1960), he described that this norm is nearly universal, and only a few members of society the old. Very young, the suffering/sick are exempt from its implication. So the theory of reciprocity covers the conceptual framework of the study and says that as an organization tends to give service quality to the patients. The patients would also reciprocate and give them loyalty.

1.11 Private Hospitals List

1. Ali Hospital Chak Jhumra
2. Faisal Hospital Faisalabad
3. Mujahid Hospital Faisalabad
4. Saahil Hospital Faisalabad
5. Khadeeja Mahmood Hospital Faisalabad
6. National Hospital Faisalabad
7. Aziz Fatima Hospital Faisalabad
8. Mian Trust Hospital Faisalabad
9. Ali Hospital Jaranwala
10. Iqbal Chughtaii Hospital Jaranwala
11. Ravi Hospital Samundri
12. Aslam Memorial Zakriya Hospital Tandilanwala

1.12 Structure of Thesis

Chapter 1 has introduced a comprehensive and concise area of this investigation or study. Along with, it discussed the previous work, research queries, and significance of the

investigation or study, research purposes, research gap and supporting theories along with the hypothesis of the study.

Chapter 2 will look into the literature review in detail. This chapter also has provided an understanding of the proposed theoretical framework.

Chapter 3 would discuss the procedures of sampling, data collection, the development of the scales that were utilized to evaluate the different constructs in this study, and the statistical tests that were used to find out the desired results.

Chapter 4 includes outcomes drawn out or results and analysis of the research conducted.

Chapter 5 includes conclusions and recommendations of the findings, practical implications, research limitations and delimitations and also future recommendations and research directions.

CHAPTER 02

REVIEW OF LITERATURE

2. Literature review

A review of literature is the survey of subject books, research articles, and other concerned materials related to a specific or particular problem, domain of research, and by doing so, it will provide a descriptive, details, summary, and analysis or evaluation of these type of studies in relation to the issue of the specific investigation being explored in that research.

Parasuraman et al. (1985) initially established the original SERVQUAL instrument. In this parameter, they defined ten (10) service quality elements commonly related to the service industry. The desired objective at that time was to draw out a standard formula to measure service quality in different sectors of the various firms. Later on, Parasuraman et al. (1988) have established this scale which was verified across different service factors. (Arasli et al., 2005; Lam and Zhang, 1999; Nelson and Nelson, 1995; Gabbie and Neill, 1996; Parasuraman et al., 1994; Boulding et al., 1993; Babakus and Boller, 1992). Developers of the instrument satisfied that there are five common characteristics, which are almost the part of each service production industry and applicable to all services producing organizations:

1. Tangibility – All physical infrastructure/facilities including equipment and staff.
2. Reliability – competency to provide or perform service responsibly and accurately as the promised.
3. Responsiveness – desires or willingness to give prompt service or help to the clients.
4. Assurance – Professional skills, expertise, attitudes, norms and courteous manners of staff and competency to capture confidence and trust.
5. Empathy – care and knowledge of the requirements of the clients, whom the firm has provided the services. (Parasuraman et al., 1988).

Arasli et al., (2006) published their work in the domain of health and gathered data from 454 patients by using a self-administered survey questionnaire with 7 points Likert scale. They used a Random sampling technique in their study. They used health service quality as independent variable being measured with the SERVQUAL model consisted of on SERVQUAL scale developed by Parasum et al (1985). Patient perception of service quality was accessed as dependent variables. Descriptive statistics were reported by the researcher which includes frequencies, means, standard deviations and percentages. To validate his results, they used exploratory factor analysis and the results of Cronbach alpha. Demographic was also aligned with the main variable of the construct. Collected data were analyzed with the use of SPSS, reliability, correlation of the variables, multiple linear regression ANOVA techniques. They calculated that service quality, patient satisfaction and related information can be applied in various service quality-related organizations. Their study, on one hand, confirms that our variables in the present study are feasible and accommodative. It confirms our hypothesized framework as gives us a guideline, that marital status and income status can be an important demographic variable for further investigations. This study also supports our study as it is also conducted in an Asian context that is Cyprus Turkey which may more feasible and accommodative in our study with our local context.

Indicator of the patient's satisfaction is mostly used parameter in the sector of medical services to measure service quality (Fenton et al., 2012; Shabbir et al., 2016). Azizan and Mohamed (2013) service quality and patient satisfaction were studied in Pahang at a public sector hospital in Malaysia. Service quality of the hospital was positively impacted by three aspects: caring for medical, caring of nursing staff and administrative service. Azizan and Mohamed (2013) pointed out that Hospital internal structure and communication have a negative relationship existing with service quality. Leiter et al. (1998) in Canadian hospitals carried out the research. They found out that patient satisfaction was expressively impacted by the consultants, nursing staff and the inquiry counter. These factors directed to a high level of patient satisfaction. Manaf et al. (2012) investigated and declared that satisfied patient ratio was 46.4 percent with service quality; while 7.3 percent of them were displeased while their study in Malaysian International

Islamic University. As formerly discussed, most analysts explained this fact; the patient's satisfaction is the key and vital aspect of patient's loyalty (Chang et al., 2013). In the current scenario, the satisfaction of the customer is not only enough factor to confirm patient's loyalty (Aurier and N′Goala, 2010; Bruhn, 2002; Chang et al., 2013). In the current competition environment, it is mandatory to build customer loyalty instead of focusing on customer satisfaction only (Aurier and N′Goala, 2010; Bruhn, 2002; Chang et al., 2013).

Research already carried out to explore the existing relationship of service quality and patient satisfaction also motivates to hypothesize the relationship in the current study.

H1: Impact of service quality on patient satisfaction is significant.

Taner and Antony, (2006) published their work of healthcare sector and collected data of 200 patients by using a self-administered questionnaire. They used self-developed six dimensions of patient satisfaction sale in this study they used health perceived service quality as independent variable being measured with the Healthcare Service Quality model based on SERVQUAL instrument. Expected and perceived care service quality was accessed as dependent variables. Descriptive statistics were reported by the researcher which includes frequencies, means, standard deviations and percentages. The data were analyzed by using SPSS, samples T-test, reliability, ANOVA techniques keeping in view the demographics of the main variables. They calculated that service quality patient satisfaction as well as behavioral intentions related data can be applied in various service quality-related organizations. Their study, on one hand, confirms that our variables in the present study are feasible and accommodative.

Naidu et al. (2007) published their work in the area of healthcare and gathered information for study by reviewing 24 international journals to draw out the key factors of patients' satisfaction and service quality. They used health service quality as an independent variable being measured by the SERVQUAL model. Patient satisfaction and different factors were accessed as dependent variables. Descriptive statistics were reported by the researcher which includes frequencies, means, standard deviations and percentages. To validate their results, he used factor analysis and the results of Cronbach

alpha. Demographic was also aligned with the main variable of the construct. Collected information was analyzed by SPSS, reliability, regression ANOVA techniques. They find out that service quality, patient satisfaction and related information could be applied in various service quality-related organizations.

Badri et al. (2008) studied the UAE healthcare sector and published their work and collected information for analysis by 244 patients by using a questionnaire. They used a random sampling technique in their study. In this study, they used health service quality as an independent variable being measured with the SERVQUAL model as initiated by Parasum et al. (1985). Patient satisfaction and some other important factors were accessed as dependent variables. In this study patient satisfaction was the result, which was influenced by some other important factors. For the validity of their results, they used structural equation modeling and reproduce results of Cronbach alpha, with an aligned demographics of with the main variable. The information collected was processed using SPSS and Amos. They calculated that service quality patient satisfaction, as well as behavioral intentions related data, can be applied in various future studies.

Gill et al. (2010) worked on the healthcare sector of Australia and published their work in the healthcare journal and gathered and reviewed the work done in this domain by using a self-administered questionnaire. They used a random sampling technique in their study. They used health service quality as an independent variable being analyzed by the model of SERVQUAL. The dependent variable of the study was the satisfaction attained by the patient. Descriptive statistics as reported by the researcher were frequencies, means, standard deviations and percentages. For the authenticity of their results, they used Cronbach alpha along with the aligned demographics of the main variable construct. The gathered information was analyzed by using SPSS. They explored that service quality and patient satisfaction related information may also be applicable in various future projects of such type of studies. Their study, on one hand, confirms that our variables in the present study are feasible and accommodative.

Chowdhury et al. (2011) conducted their study in Kuwait and published their work in the healthcare sector and collected information for study by 426 patients by using a

questionnaire. They used a systematic sampling technique in their study. They used various aspects of patient satisfaction as an independent variable being measured with the instrument developed by Ware et al. (1978). To prove the validity of their results, they used exploratory factor analysis and reproduce results of Cronbach alpha, aligned with the demographics of the main construct of the variables. Data collected was analyzed by using SPSS and Amos. They explored patient satisfaction as well as different factors impacting related data can be applied in various service quality-related study and the organization. Their study also confirms that our variables in the present study are feasible and accommodative. It confirms our hypothesized framework as it gave us a guideline for our work. This study also supports our research as it was conducted in other Asian countries.

Kessler (2009) conducted his research in the USA and published his work in healthcare. He collected information for analysis form 678 patients by using a questionnaire survey. He used a purposive sampling technique in his study. He took patient satisfaction as an independent variable in his study. Patient loyalty was accessed as the dependent variable. In this study, he used 5 points Likert scale. He reported descriptive statistics including frequency, mean, percentage, regression, Z-score and standard deviation. To test his results, he used Cronbach alpha and reliability analysis with the demographic alignment with the main variable. To draw out the study results data was analyzed by SPSS. He explored that the link between the patient's satisfaction and the patient's loyalty was significant. In this respect, this related data can be applied in various service quality and patient satisfaction regarding studies or organizations. It confirms our hypothesized framework as gave us a guideline and future directions for further investigations. This study also supports our research as it was also conducted in many European (advanced countries) with similar context which might be beneficial for us to explore some important aspects considering our local context.

Aagja and Garg (2010) researched in India and published their work in the healthcare domain. They collected raw information from 201 patients by using interviews. They used a convenience sampling technique in his study. They have taken health service quality as independent variables being measured with the SERVQUAL model based on

the Parasum et al (1985) work. Patient perception of service quality was accessed as dependent variables. To prove the credibility of the results, they used CFI factor analysis and the results of Cronbach alpha along with aligned demographics of the main constructs of variables. They used SPSS to analyze the collected data. They extracted that service quality, patient satisfaction and related information may be applied in various service quality-related organization and future studies. Their study also confirms that our variables in the present study are feasible and accommodative. It confirms our hypothesized framework as it provided us a guideline for the planning of this study. The results of this study also supported our work as it was conducted in Asian context which might be more similar, feasible and accommodative in our local situations.

Padma et al. (2010) conducted their study in India. They published their work in the journal of healthcare and gathered data form 204 patients by using a questionnaire survey. They used a convenience sampling technique in this study. They used health service quality as an independent variable being measured with the SERVQUAL model. Patient satisfaction was studied as dependent variables. To prove the validity of results, they used confirmatory factor analysis (CFA), and reproduce results of Cronbach alpha keeping in view the demographic alignment with the main variable of the construct. The gathered information was processed using SPSS and Amos. They described that service quality and patient satisfaction related data can also be applied in various future studies and service quality related firms. Their study confirmed that our variables in the present study are feasible and accommodative. It also supported our hypothesized framework and provided us a guideline for conducting current research activity.

Al-Broei (2010) conducted his study in Saudi Arabia and published his work. He touched and collected information about 749 patients by using a questionnaire. He used a stratified random sampling technique in his study. He used healthcare service quality as an independent variable being measured with the SERVQUAL model. Patient satisfaction was studied as dependent variables. He considered the mixed-method approach very feasible for this type of research. In this research scale of reliability was verified by the use of Cronbach alpha. Cronbach's alpha is high for five service quality factors and provided to be reliable in influencing patients' satisfaction. Furthermore, the

demographics of the study were also aligned with the main variable of the construct. SPSS was used to analyze the collected data with appropriate and accommodative statistical tools. He calculated that service quality and patient satisfaction related information may be applicable in various future studies and service quality related firms/organizations. His study, on one hand, endorses that our variables in the present study are feasible. It also endorses our hypothesized framework as it gave us a hint for future directions. This study also guides us as conducted in Asian countries.

Chahal and Mehta (2013) conducted their study in the healthcare sector of India. They published their work in the domain of health and collected information of 528 patients by using a questionnaire survey. They used a stratified random sampling technique in this study. They used self-developed six dimensions of patient satisfaction scale in this study. They used patient satisfaction as an independent variable being measured by their six dimensions developed the instrument. Patient loyalty was taken as controlled variables. To test the validity of results, they used exploratory factor analysis (EFA). Gathered data were analyzed by using SPSS and Amos. They calculated that service quality patient satisfaction as well as behavioral intentions related data can be applied in various service quality-related future studies and organizations.

Couralet et al. (2013) conducted their research in France healthcare and published their work and explores the gathered data of more than 10000 patient's perceptions by using questionnaires. They used a convenience sampling technique in their study. They used health service quality responsiveness as independent variables being measured with the SERVQUAL model developed by Parasum et al. (1985). Patient perceptions were accessed as dependent variables in this study. The descriptive statistics of the study were reported by the researcher. For the accuracy and validity of his research results, they used the results of Cronbach alpha with aligned demographics with the main variable of the construct. Research related collected data were analyzed by using SPSS. They calculated that service quality and patient satisfaction regarding data can be applicable and feasible for various service qualities related to future research projects and organization. This study also supported our study as it was also conducted in the European context which may more feasible and accommodative in our study.

Tri Widianti et al. (2014) studied the Indonesian healthcare sector and published their work findings in the healthcare domain. They gathered information for their studies form 157 patients by using a questionnaire survey. They used a convenience sampling technique in their study. They used three factors of behavior formation as an independent variable being measured. Patient loyalty was observed as dependent variables and explored descriptive statistics of the study was reported by the researcher. More ease, less tension and good quality treatment from the same service providers may also lead to attaining patient loyalty (Hausman, 2004). Anbori et al. (2010) elaborated a patient's loyalty as an intentional program of service to retain clients in the business long run by giving them superior service quality. To gain a patient's loyalty, service organizers must consider patient necessities and prospects (Aliman and Mohamad, 2016). Anbori et al. (2010) explained that quality of the service and its elements are of vital importance and significant to patients and have tools to prioritize and assure that they are placed in, and then this would help to satisfy the patient and consent, to recycle the healthcare services.

Mortazavi et al. (2009) conducted a study in four Iranian private hospitals on patient satisfaction and loyalty using six factors: operation rooms, administration services, nursing care, meals, routine expenses, and their room status. They concluded that the patient's satisfaction and patient loyalty are significantly integrated. Patient's satisfaction and patient's loyalty have positive and significant relationships with patient room, care of nursing staff, admission, operating rooms and administrative services Hu et al. (2011) conducted a study in the healthcare sector of Taiwan's, measured patient's satisfaction, patient's loyalty and explored that the impact patient satisfaction on patient loyalty is not significant or reasonable in the hospitals of Taiwan. Fornell (1992) declared, that loyal clients are not only contented, but these customers should be loyal one, (loyalty of the customer is not limited, complete and perpetual (Roberge et al., 2001). Service providers need to be in close contact with patients to achieve their loyalty and to find out their essential desires and prospects (Roberge et al., 2001). As to develop future business terms between medical facilities and their patients, Service quality factor is not enough to measure (Gaur et al., 2011), so in this regard there is a desire for healthcare institutions, to work out somewhere else for the fulfillment, to establish loyalty and to decrease or

reduce the current existing risk factors (Ranaweera and Prabhu, 2003), as this needs enough budget and energies for the creation and development of new contacts of clients except to continue the existing ones (Kessler and Mylod, 2011).

Studies conducted to explore the existing relationship between service quality, patient satisfaction and patient loyalty also guide to hypothesize the relationship in the current study.

H2: Service quality has a significant impact on patient loyalty.

H3: Patient satisfaction has a significant impact on patient loyalty.

H4: Patient satisfaction as a mediator has a significant impact on the relationship between service quality and patient loyalty.

Shabbir et al. (2014) managed research in Islamabad Pakistan and published their concluded work in the healthcare journal. They collected information from 600 patients by using a questionnaire from the Public and Private Hospital of Pakistan. They used a stratified random sampling technique for data collection in their study. They used health perceived service quality as independent variable being measured with Health Care Service Quality model based on the Parasum et al. (1985) developed the instrument. The dependent variables of the study were the patient's satisfaction and patient's loyalty. In research patient satisfaction also played a mediation role in the study framework. In this study scale of reliability was validated by the use of Cronbach alpha. Its value is high for five service quality factors and provided to be valid, reliable and appropriate in influencing patients' satisfaction. The null hypotheses of the study were rejected. They find out that service quality and patient satisfaction related data can be applied in various service quality-related future studies and firms/organizations. This study also supported our study (This study was conducted in Islamabad while ours is in Faisalabad).

Alimana and Mohamad (2015) conducted their study in the healthcare sector of Malaysia and published their work. For this study, they gathered data of 273 patients' by using a survey questionnaire. In this research work, they used a convenience sampling technique. They used health service quality as an independent variable being measured with the

SERVQUAL model. Patient satisfaction and the behavioral intentions of the patients were accessed as dependent variables. They reported the findings of their descriptive statistics. To validate their results, they used the results of Cronbach alpha along with the aligned demographics of the main variable of the construct. In this study, the collected information was analyzed by using SPSS. They find out that related service quality, patient satisfaction and related information may be applicable and utilized in various service quality-related research work and industries /organizations. Their study confirmed that our variables in the present study are feasible and accommodative.

Byram et al. (2015) conducted their study in the healthcare sector of India and they published their work in the healthcare sector. In this investigation, they gathered the information form 500 patients by using a questionnaire survey. In their study, they used a systematic sampling technique. They used health service quality as an independent variable being measured with the SERVQUAL model developed by Parasum et al. (1985). Patient satisfaction was considered as dependent variables in this study. Descriptive statistics of the study/findings were reported by the researcher. To check or validate their results, they used (SEM) and reproduce the results of Cronbach alpha with the aligned demographics with the main variable of the construct. The research collected information was evaluated by the use of SPSS and Amos. They expressed that the quality of the service and patient satisfaction related data can be applied in various service quality-related future research work and firms/organizations. It also confirmed our hypothesized framework and gave us guidelines for the accomplishment of the work for further investigations.

Kondasani and Panda (2015) conducted their study in the healthcare sector of India and published their work in the area of healthcare. In this study, they collected information from 475 patients by using a survey questionnaire. They used a random sampling technique in his study. They used health service quality as an independent variable being measured with the SERVQUAL model. Patient satisfaction and patient's loyalty were accessed as dependent variables. The descriptive of this study were reported by the researcher. To draw out the validity of their results, they used component factor analysis (CFA) and the results of Cronbach alpha with aligned demographics with the main

variable of the construct. They used SPSS for the analysis of collected information. They explored that service quality, patient satisfaction and related information may be applied in various future studies and service quality related organizations.

Sadeh (2016) conducted his study on the healthcare sector of Iran and published his work in the field of health and gathered data by developing 17 quality analysis dimensions by using a questionnaire survey. He used the evaluation laboratory technique using expert opinion in his study. He used health service quality as an independent variable being measured with the SERVQUAL model. Patient satisfaction and their intentions were accessed as dependent variables. In this study patient satisfaction also played the mediate role. In this study researcher also reported the descriptive of the investigation. To find out the authenticity of his results, he used SEM. The collected information of the study was analyzed by using SPSS and Amos.

Ahmed (2017) studied the healthcare sector of Malaysia and published his work in the healthcare journals. He collected data form 438 patients by using a survey questionnaire from the Public and Private Hospital of Malaysia for his research. In his study, he adopted the items developed and used by Goven et al. (2012) in his work by using 5 points Likert scale. He used health performance service quality as an independent variable being measured with Health Care Service Quality model. He reported a descriptive approach considered to be feasible for this type of study. He applied both techniques descriptive and analytical for data attaining and data evaluation. In his study scale of reliability was verified by the use of Cronbach alpha. Cronbach's alpha vale is high for five service-quality dimensions and provided to be valid, reliable, and appropriate and significant in influencing satisfaction of the patient and rejected all the null hypotheses. In this research, the working demographic was also aligned with the main variable of the construct. SPSS was used for the data analysis and suitable and appropriate techniques were used. They exposed that service quality and patient satisfaction related information may be applied in various service quality-related organization and for future investigation.

Khodakarim et al. (2017) conducted their study in the healthcare sector of Iran and published their work in healthcare domain. They gathered data from 500 patients by using a questionnaire. They used a convenience sampling technique in their study. They used health service quality responsiveness as independent variables being measured with the SERVQUAL model. Patient satisfaction was accessed as the dependent variable. Descriptive statistics were reported by the researcher of this research work. To validate their results they used results, of Cronbach alpha along with the aligned demographics with the main variable of the construct. The information of this study was analyzed by using SPSS. They calculated that service quality and patient satisfaction related information may be applicable in various service quality-related organization and for future prospective.

Javeed (2017) conducted his study in Pakistan and published their work in the sector of healthcare. He collected data form 456 patients by using a self-administered questionnaire. He used a convenience sampling technique in his study. He used health service quality as an independent variable being measured with the SERVQUAL model, developed by Parasum et al. (1985). Patient satisfaction was accessed as dependent variables and descriptive statistics was reported by the researcher. To test the validity of his results, he used Laplace criterion analysis techniques and reproduce results of Cronbach alpha keeping in view the aligned demographics with the main variable of the construct. The collected data of this study were analyzed by using SPSS. He calculated that service quality and patient satisfaction related collected information may be applied in various service quality-related organization and future further investigations.

Liu et al. (2017) conducted their study in the healthcare sector of China and published their work in the field of healthcare. They gathered data from 508 patients by using a self-administered questionnaire with 5 points Likert scale. They used a random sampling technique in his study. They used HR practices as independent variables being measured with the instrument developed by Collins and Smith (2006). Patient satisfaction was accessed as the dependent variable. In this research patient satisfaction also played the mediation between doctor-patient relationships. To validate his results, they used the SEM technique and reproduce results of Cronbach alpha along with the aligned

demographics with the main variable of the construct. The collected data were analyzed using SPSS and Amos. They calculated that HR practices, patient satisfaction as well as doctor-patient communication-related data can be applied in various service quality or customer retention related organizations.

Ahmad (2017) conducted his study in the healthcare sector of Bangladesh and published his work. He gathered data from 204 patients by using a self-administered questionnaire. He used a purposive sampling technique in his study. He used health service quality as an independent variable being measured with the SERVQUAL model. Patient satisfaction and loyalty were accessed as dependent variables. In this regard for the validation of his results, he did an EFA. The investigation data were analyzed by using SPSS and Amos. He calculated that service quality patient satisfaction, as well as patient's loyalty related data, may be applied in various service quality-related organization.

Gummesson (1992), find out or explored that the service quality concept varies in service firms and service-producing institutions. The managers of service proving organizations believed that the results of service quality can be achieved by the production of the quality product only. They are also well aware of the philosophy that the production of the quality product was easy as compared to its execution and vice versa for the production of quality of product and same for its measurement because of intangibility; while, its quality is tangible, measurable and inspection is possible to avoid deficiency or defects which are the indications of low quality (Buyukozkan et al., 2011).

Butt and Run (2010) studied health service quality in the private medical sector of Malaysian. They explored that service quality flaws between service prospects and service observations in the private medical sector or facilities of Malaysia. They pointed out that private healthcare service observations were much higher than the service prospects of the patients in Malaysia. Andaleeb (2001) described that there is no need to measure service quality factors (tangibility, responsiveness, reliabilities, assurance and empathies) in the particular services situation or environment. He projected that if quality factors are changed to find out particular or specific services conditions. In 2001, he studied or considered the quality of the service observations and satisfaction of the

patient in the healthcare sector of Bangladesh. He takes five factors: assurance, discipline, responsiveness, communication and service tips (baksheesh) to find outpatient satisfaction. His study results pointed out that all five factors have a positive impact on patient satisfaction. Manaf and Nooi (2009) studied service quality in Malaysian hospitals of the public sector and its effects on patient satisfaction. Patient satisfaction was measured based on the lab (employees, information and treatment) and physical (cleaning, visiting and environment) elements. Both elements have a significant and key impact on patient satisfaction in Malaysia hospitals in the public sector. Services quality has a persistent impact on many other variables like patient satisfaction, patient loyalty, welfare and pleasantness etc.

Manaf et al. (2012) explored and declared that about 46.4 percent of the patients were found satisfied with the service quality, while 7.3 percent were displeased while their study at the International Islamic University Malaysian Healthcare Centre. As formerly discussed, most analysts pointed out or declared that the patient's satisfaction is the basic aspect of patient loyalty (Chang et al., 2013). Patient satisfaction is not enough to factor to confirm the patient's loyalty (Aurier and N′Goala, 2010; Bruhn, 2002; Chang et al., 2013). In the current era of the competitive market, it has become mandatory to build customer loyalty instead than customer satisfaction only (Aurier and N′Goala, 2010; Bruhn, 2002; Chang et al., 2013). Client satisfaction was not only the factor or element to validate patient loyalty (Aurier and N′Goala, 2010; Bruhn, 2002; Chang et al., 2013. Healthcare literature supported that the association existing between service quality healthcare perception and patient's satisfaction indicated a remarkable, directly proportional link or association, higher the quality of the services regarding healthcare more attired would be satisfaction level attained by the patient (Leisen Pollack, 2008; Bakan et al. 2014).

Cronin and Taylor (1992) had explored a valid positive and significant association existing between service quality and gained the satisfaction of the patient. Badri et al. (2009) indicated the fact that attained level of satisfaction and patients were seems to be the primary element or point in the firm, service delivery appraisal and its execution, furthermore considering the patients necessities or requirements principals of healthcare

were of vital importance in attaining or gaining much more value or high worth in competitive market. In the environment of healthcare, patient satisfaction has mostly used the instrument to quantify the quality of the services received. Shabbir et al. (2016) has found out or explored a positive or significant association existing between the quality of the healthcare service and attained satisfaction level of the patient, also proved by previous research results. It might be the variance existing between perceived and observed service quality, this can also be a scale used for the evaluation of patient satisfaction (Shabbir et al., 2017 Forthcoming). Favorable response of patient and his mindset for some specific medical facility will be an extra edge or advantage for that medical facility and be plus point for the healthcare facility (Brennan, 1998).

Chahal and Mehta (2013) and Naidu (2009) exposed another view of the qualities of the attained healthcare service and patient's satisfaction. Patient's satisfaction played the role of a link existing between service quality and desires of behaviors. Since 1997, researchers or analysts of healthcare had been giving or considering key importance of the model of SERVQUAL, patient's satisfaction and loyalty to quantify, evaluate or measure these facts. It will be helpful to find out the deficiency of gap existing between the service delivery or executions and patient expectations for the service providers providing healthcare or medical services to their customers (Al-Borie and Sheikh Damanhouri, 2013; Zarei et al., 2015). When the service suppliers find out their issues or problem related to their service, they pay special attention to remove these issues related to quality service performance or delivery to accommodate the patients spontaneously Kondasani and Panda 2015).

Hu et al. (2011) conducted a study in the healthcare sector of Taiwan's, measured patient satisfaction along with patient's loyalty and explored out that the impact of patient's satisfaction on patient loyalty is not significant or reasonable in the hospitals of Taiwan. Fornell (1992) declared, that essentially the loyal clients are not contented, but these clients should be the loyal one (level of loyalty of the customer is not limited, complete and perpetual (Roberge et al., 2001). Service providers need to be in close contact with patients to achieve their patient loyalty and to find out their essential desires and prospects (Roberge et al., 2001). As to develop a long term business relationships

between medical facilities and their patients, quality of the healthcare service is not an enough aspect to be measured (Gaur et al., 2011), so in this regard there is a desire for healthcare institutions, to work out somewhere else for the fulfillment, to establish loyalty and to decrease or reduce the current existing risk factors (Ranaweera and Prabhu, 2003), as it needs additional budget with energies to create more contacts of clients except to continue the existing ones (Kessler and Mylod, 2011).

Loyalty of customers, which was denoted by the client firm, deep commitments or affiliations to the product or organization which motived him to come again for repurchasing for future requirements (Shirazi et al., 2013), explored that loyalty was a complicated and difficult process It is very important to get positive results from the customers, especially in the sector of the services because it is interlinked with the variety of future profits or outcomes, including increase in the customers and their value addition (Wieseke et al., 2014).

Scitovsky (1945), studied or explored that price may be an indicator or a factor of the quality simply suggests or argued that demand related or quality information or supply related information of the product was mostly circulated by the price. The high price of the product might be an indicator of high quality, highly demanded or the heavy production expenses or costs of that product of its superior quality or competitive edge. To explore or find out the authenticity of this statement whether true, false, various investigators had used some objective criteria to find out or analyze whether lower-priced options of the product or service are not better than a high-priced option (Riesz, 1978; Sproles, 1977). Pricing of services has given minor or less attention as associated with product pricing. As a share of the service sector and its importance is increasing day by day in the economy and become a major profit generating source or factor for many organizations or firms. In this scenario, a need to understand the price of service is generated or produced (Doctors et al., 2004). Literature studies of the satisfaction attained by the clients or patients had turned attention to pricing, customer satisfaction and price perceptions. Hø´st and Knie Andersen (2004) explored or draw out that between perceived competitiveness and client satisfaction a positive or significant association or relationship was existing.

Dabholkar et al. (1996) find out or reported that respondents regularly visited the price list of the desired service as a factor of satisfaction. Varki and Colgate (2001) showed that the existing association between rate observations and attired level of satisfaction was positive and significant, which is applicable when price observation was evaluated comparatively, but not completely. Apart from this, market experts or researchers supported the notion that the value and hence price of the service impart a key role in client satisfaction while generally it is not tagged with the price (Anderson et al., 1994). Clients attained the satisfaction level comparatively has high flexibility in tolerating any rate variations (less elastic price), resulting in increased profitability. Varki and Colgate (2001) also indicate a positive association existing between rate observations and achieved level of satisfaction, applicable when rate observations were evaluated comparatively, not completely. Content clients are more probably to accept an increase in price (decrease in elasticity of price), which causes increased profitability (Beerli et al., 2004).

As even in the hospitals of the public, where price was considered as a symbolic element for the customer cost as in this case, in this scenario this was expressed that the prospects of quality or satisfaction of the patient were not moderated with direct link developed between product price and its performance because people conscious to take it without paying any price. Therefore, investigation on the relationship existing between the satisfactions attained by the use of the product and its cost or price and product advocates that perceptions of price positively hit the satisfaction level of the client. In this respect, it would be investigated as an independent construct and not tagged with the quality of the service in obstruction Dabholkar et al. (1996). It will be convenient to use price as the independent variable and jointly with another independent variable (Lim and Tang, 2000) and the quality of the service might also be taken to elaborate the satisfaction level of the customer.

Research work already carried out to draw the existing role of price in the service quality also motivates to hypothesize the relationship in the current study.

H5: Price, as moderator has a significant impact on the relationship existing between service quality and patient satisfaction when the price is low patient satisfaction, is high and when the price is high patient satisfaction is low.

Communication was considered as a vital and an important factor in tracing out the complaint and its treatment, as it provided an opportunity to gives the individual to give complete information of the issue or problem. In the environment of the delivery of the healthcare services, clinics and patients are considered to be hermeneutic webs of mystification and impact or significance in which the primary role of the doctor was of sender or translate the provided data or information, features or symptoms of the patients in the perspective of their existing body references (Kessing, 1987). There was a trend of the patients or customers to mostly respond or rely based on their personal collected information sources (e.g. through friends or family members) when they came for the selection of a private healthcare facility for the attainment of the services. As a fact, the words of the mouth (WOM) approach to spreading collected data about the facility of the healthcare or service providing organization was of vital importance. Since WOM is having no existence or visibility, often face to face interactions, and observations collected were considered highly credible or reliable because a customer's negative WOM can destroy the image or existence of the business in the competitive market. In this regard, WOM was related or relevant to the delivery of service quality especially when consumers often collected WOM data or information to decrease the higher level observed or perceived factor of the threat or risk linked with those specific services. In past researchers had declared WOM the vital factor for the satisfaction/dissatisfaction of the clients or customers (Reicheld and Sasser, 1990).

Coulter (2002) declared or pointed out that most of the preferences were articulated by the middle-class people which, were very effective too, and in the same way, older patients also like to use more participative decision-making therapy or prefer the patient-centered approach while taking treatment. Effective consultant communication with the patient was the key element of the empathetic or concerned and professional or capable facility of the healthcare and an important part of the high standard medical services and best quality and source of the patient’s satisfaction (Kaplan et al., 1989; Levinson et al.,

2010). It is a dynamic, multi-factor and refined procedure that might have so many aspects or elements, consisting of the means in which under treatment patients and consultants evaluate the conversation process and particular conditions where specific attention is given to the patients (Caiata-Zufferey and Schulz, 2012; Levinson et al., 2010; Street et al., 2007). It can be a major obstacle to patients' devotion (Buxton, 2013). Consultants should be well aware of the fact that some of the patients are very sensitive to discrepancies in consultant conversation; such types of patients rate of retention is less in their association that is favorable to be more cooperative with treating consultant. The gained output of such performance and attire is comparatively less, confidence and attained a level of satisfaction with service supplier (Buxton, 2013; Mercieca et al., 2014).

The recent investigation finds out that the healthcare services should be planned around the requirements of the patients and prospects to uplift treatment loyalty, confidence, and trust in the healthcare facility and finally, betterment in the patient's health will be the desired output (Mercieca et al., 2014). To develop future business associations with their patients, consultants might incorporate patient-oriented conversation methods which may be companionable with patient's requirements and might be helpful in diagnosis purpose and information regarding (Mercieca et al., 2014).

Studies conducted to find out the existing role of communication in the service quality also guide to hypothesize the relationship in the current study.

H6: Communication, as a moderator has a significant impact on the existing relationship between service quality and patient satisfaction when communication is effective patient satisfaction will be high and when communication is ineffective patient satisfaction will be low.

Access to the healthcare or medical facility was translated to have the timely use of personal health services to attain the best health outcomes (IOM, 1993) having or attaining good or easy access to healthcare required three important distinct steps: basic step was the entry into the healthcare facility or system. Access, as a system or a cycle of the care process, is the desired healthcare services were available and accommodated

when there were a need and patient-physician, interactions were operationally followed or defined (Turner and Pol, 1995). Attaining the access of the designated points from where the patients can receive their desired healthcare or medical services. Access is considered as the flow of healthcare, was the accessibility, availability of the desired services and the desired accommodation for the attainment of the healthcare services, when they were desired or required and were in a sequence or operationally elaborated as number visits or the patient consultant interaction or contacts (Turner and Pol, 1995), the patient time of waiting for their turn and their element of ease to attain services (Bowers et. all., 1994; Hall and Press, 1996; Levis, 1994; Hopton et. al., 1993), its reliability, availability of the desired service (Handler et. al., 1998; Mckinley et. al., 1997) correlated with their healthcare treatment practice (Hall and Dornan, 1988; Piette, 1999; Ross et. al., 1993). Patients waiting times, services convenience and availability of desired services associated or integrated with healthcare experiences (Tucker, 2002).

Narang and Sharma (2011) also investigated gender differences and approaches. They pointed out that for the delivery of healthcare services and monetary aspects and access to a healthcare facility, this might have a significant positive impact on its prospective among men. While among women, it was the delivery of the healthcare and healthcare personnel's dealing and required drug availability. This factor was reproduced in the investigation findings. While on the other hand, women were found to be sensitive, expecting empathy and sympathy at the place of treatment or health facility from the service providers. Zarei (2015) identified eight factors of basic healthcare service quality including consultant's consultation, physical environment, patients required information, cost of the service and the efficacy of the services of the administrative staff. In this regard, investigators are agreed that the basic healthcare quality of the services is a multi-functional perspective. In this regard, investigators are agreed that the basic healthcare quality of the services is a multi-functional perspective and access to the healthcare domains have a mandatory impact on the existing association between the patient's satisfaction and service quality.

Work carried out to explore the existing role of access to the service quality also motivates to hypothesize the relationship in the current study.

H7: Access, as moderator has a significant impact on the existing relationship between service quality and patient satisfaction when access is easy satisfaction of the patient, will be high and when access is hard satisfaction of the patient will be low.

Much of the service quality performance analysis expresses or concludes that the existing association between service quality, patient satisfaction and patient's loyalty in the healthcare sector is significant (Shabbir et al., 2016; Park et al., 2016). A positive or significant impact of service quality on patient satisfaction and patient's loyalty in the healthcare sector has already studied by researchers, as hypothesized in our study. In most of these studies some important factors/aspects like cost/price of service (keeping view patient income/affordability/purchasing power etc.) Pantouvakis and Bouranta, (2014) find out that both the empirical and qualitative evidence of the investigation which indicates that satisfaction of the customer and service quality were many-dimensional factors or aspects, whose ingredients of quality, along with the suitability and cost factors, impacts the overall satisfaction of the clients, patient-doctor communication (key factor in diagnosing disease and its appropriate treatment/medication to coup up the problem) Trumble et al. (2006) patient's satisfaction as proved by the variations of the satisfaction level of the patient from partial to full with the consultants treating methods, communication and patient satisfaction with the healthcare facility encounter and access/location of hospital/medical facility (geographical access, transport availability and generally familiar area make it easy to reach).

Owusu Frimpong et al., (2010) find out various experiences of the access among the public healthcare and private healthcare facility service users. Both the public healthcare and private healthcare service users pointed out their major issues or complaints regarding the healthcare facility access despite the myriad adopted strategies targeted at resolving the situations in both of the desired sectors. Therefore, the problems or issues of healthcare access were of immense significance and required consideration on the warm basis by the service provider management and providers of the service to uplift the quality of provided services and its delivery to the patients for uplifting their attained satisfaction level of the patient. The users of private healthcare bear heavy charges than the users of the public healthcare facilities in attaining healthcare services to coup up with

emergencies in short period of time, having facilitated, flexible services hours for taking time of the consultant and desired medical treatment for their issues or problems with less inconvenience are not accounted for or considered in these studies.

In this study provision of high quality services, a high level of patient satisfaction, at comparatively lower cost/price level, with effective communication and easy access to the medical facility or easy location will be observed to make this study more concise and comprehensive which will be a valuable addition in the healthcare sector.

2.1 Conceptual framework

It is an investigative tool having many deviations and frameworks for analysis. Conceptual distinctions and the arrangements of ideas are managed by this conceptual framework. Professor Roger Vaughan of Bournemouth University compares has exemplified this framework with vacations planning. When you plan your journey, you collect information, visit guidebooks to mark important and key places of the journey and the best accommodation. You get guidance to plan out the project from this collected information. A conceptual framework also reviews past research work to chalk out the research project, its theory and methodology to draw out the best favorable results. It might be much more than that of a review of the literature. It doesn't only present current published research work in the concise summarize form. It also considered all current existing theories, findings and aspects for your investigation questions. As Jane Austen expressed it will not be a study of the academic work, essay for the work but it also involves the variations of the works, drawbacks, findings, inspirations related letters or journals written. Multiple disciplines to adequately framework of investigation project must be considered by the conceptual framework.

The existence of a provisional model will help find out or select the rational structure of the full investigation project and its plan out. This model will be helpful to guide regarding information collections, from which samples and about what features or variables of these study cases.

The study model/sketch of this research consisted of five interconnected factors.

The first part measured the observation of the patients about the service quality of the healthcare sector. Quality factors were measured by the use of five (05) latent variables (tangibility, reliability, responsiveness, assurance and empathy) with 39 questions, as used by Kondasani and Panda (2015) in his study.

Dependent variables of the study, patient satisfaction and patient's loyalty of the patient taking treatment from these healthcare facilities were investigated and measured with 19 questions, as used by Kondasani and Panda (2015) in his study.

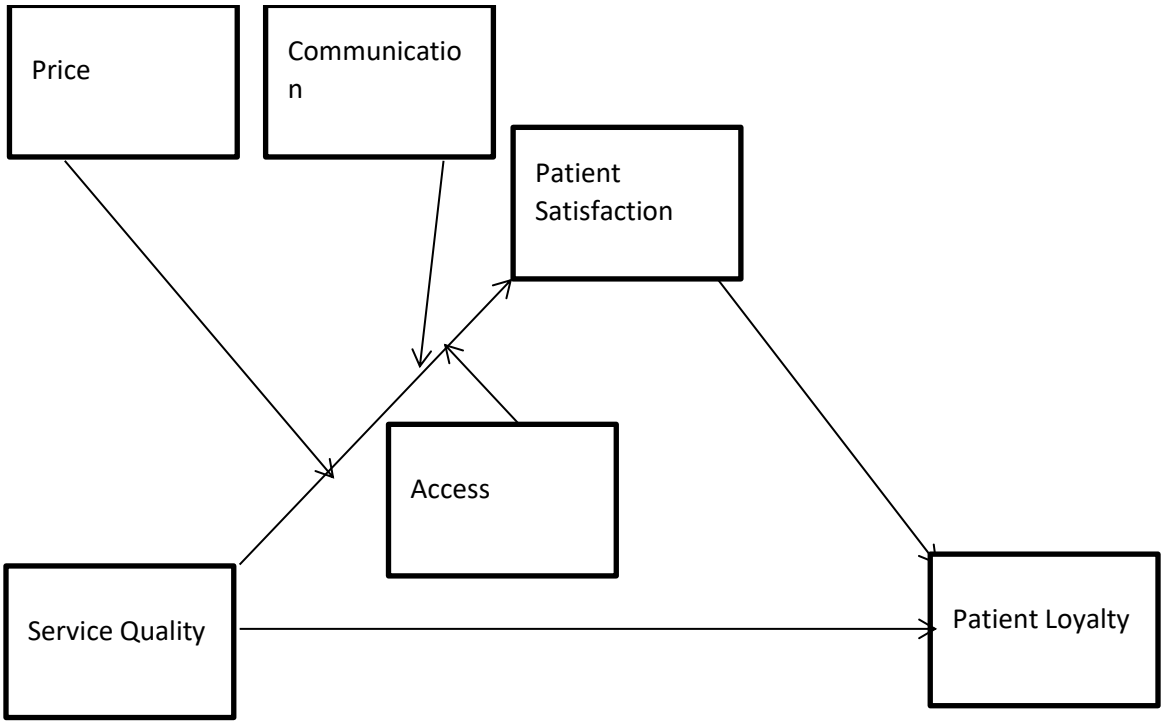
Apart from these variables, price, communication and access to the healthcare facility factors have also studied which moderate the association existing between service quality and patient satisfaction.

Price effect has observed under 06 factors (price reliability, price transparency, relative price, price-quality ratio, price fairness and price in general) with 23 questions, as used by Matzler, et al. (2007) in his study.

Patient and doctor communication have studied or investigated with 10 questions. Doctor's communication skills (Trumble et al. 2006).

Access to healthcare providers has investigated with 12 questions. Access to healthcare provision Owusu-Frimpong et al., (2010).

Figure 1: Conceptual Frame Work



CHAPTER **03**

RESEARCH METHODOLOGY

3. Research Methodology

This section of methodology elaborates arrangements or steps has taken to investigate or find out an exploration problematic or issue and the standard operating procedure for the specific procedures or operation applications, systems used for the identification of required process, and to analyze information applicable for the considerate of problems or issues, thereby, give opportunity to the reader to critically appraise a study's overall rationality and consistency. This section of the methodology of an investigations paper was to justify two main queries or questions raised:

By which way data collected? And, by which procedures of processes was it processed or analyzed to draw out the results? This chapter will be written in the past tense and be concise, precise, to the point and comprehensive.

This part of research explores the methods or techniques used for investigations and the details of the procedures adopted or used in the investigations. The procedures adopted for data collection and used techniques for analysis are also discussed in this portion.

3.1 Research Design

This investigation was based on the rational techniques and procedures utilized in this study was adapted for information collection and the association of the variables independent variable, dependent, mediation and moderations were studied or drawn out. Data were processed by the quantitative techniques for better results. The patients were contacted at their respective hospitals/medical facilities to fill the questionnaires in the regular settings of their treatments/hospital environment. The findings of the research are not affected by research interference. The unit of analysis was patient availing treatment from selected private sector hospitals of Faisalabad city.

3.2 Instrument development

It is the common word or routine term that mostly the investigators use for evaluation and the measurement device (survey, test and questionnaire). For making a distinction between instruments and the instrumentation, take that the instrument was the apparatus(method) and instrumentation was the operations adopted (the process of developing, testing, and using the device). It is further segregated into two major classes, investigation related and subject-related, segregated by those instruments that the investigator suggested verses suggested by the participants of the investigations. Keeping in view the questionnaire the researchers chose the instrument for data information.

In this study, data was collected by using a (02) two-part self-administered questionnaire. Part A pertains to responding persons demographics (like Medical facility, gender, qualification, age, job status and province) Part B measures (05) five factors of Service Quality (Tangibility, Reliability, Responsiveness, Assurance and Empathy), Patient Satisfaction, Patient Loyalty, Price factors (Price Reliability, Price Transparency, Relative Price, Price Quality Ratio, Price Fairness and Price in General), Patient-Doctor Communication and Access to the healthcare facility. Part B having 103 items (Five (05) Point Likert scale ranging from Strongly disagree to Strongly agree) used in this developed instrument. Original questionnaire in this study planned in English.

To attain data from the patient's convenience sampling technique was adopted in this study. (Aagja and Garg (2010), Padma et al. (2010), Couralet et al. (2013), Alimana and Mohamad (2015) and Khodakarim et al. (2017) used convenience sampling technique in their studies. The questionnaire for investigations was distributed to the patients in private sector hospitals of Faisalabad. In total, 650 questionnaires distributed to the treatment of availing patients from selected private sector hospitals of Faisalabad. Analysis conducted by using SPSS version 22 and Preacher and Hayes mediation model 4 for the study of mediation impact of patient satisfaction. In this study moderation Model 2 for the study of moderation and mediation moderation model 7 by focusing on PROCESS version 3 for SPSS and SAS. (Shabbir et al., 2016) used this questionnaire in his healthcare study.

3.3 Pilot Testing

A pilot testing was defined as a small initial test study to evaluate basic study standards and protocols, the validity of used data collection instruments, adopted sample selection techniques and other research strategies in planning the overall process for conducting a larger study. It was one of the vital stages in a research process and was conducted to access key problem areas and drawbacks in the study instruments and procedures prior to the process of execution of full project study. It was also helpful for the research team to become familiar with the research process (ZA Hassan et al. 2016). It recommended the validation of the questionnaire through the inquired questions. In this process language of questions, age, education and job status of the respondent has also considered.

3.3.1 Data Screening

In this study, data was collected from the questionnaire and entered into SPSS for further process and analysis. Tabachnick and Fidell's (2001) recommended data screening process, which has been developed for screening data for normality prior to hypothesis testing and provides strategies for correcting it.

3.3.2 Missing Values

In this study, 570 questionnaires were collected from the patients and 19 questionnaires were discarded as these questionnaires were found not unfilled. The 551questionnaires were found completed in all aspects; there were no missing information in the questionnaire and SPSS datasheets.

3.4 Data and Population

Primary data is the original data that was attained to conduct or launch the investigation project. Primary data is most beneficial because it is specifically developed to fulfill your research requirements. In routine, it might be an expensive one. It is the responsibility of the researcher to conduct a study on a specific area, to draw out the results of a specific research question and its applications, the earlier might have targeted a specific domain for study. A group of firms such as of the specific type of the organizations, a specific class of peoples as categorized by their profession (like a student, manager etc.)

In this study original/primary information collected for analysis. Populations for this study were all patients of private sector selected hospitals of Faisalabad. Samples for study were collected by convenience sampling from the selected private sector hospitals of Faisalabad. Similar research was conducted by Butt and Run, (2010) to consider private sector services quality of the healthcare system of Malaysia. The sample size was estimated to be 515 patients by sample calculator, with a 95% confidence level and 5% confidence interval, according to (Hair et al., 2013).

3.5 Sample and Technique

In investigation process terms a sample is used for a group of people, objects, or items that are captured from a larger population for the investigation purpose. It should be the logical representation of that specific population and must ensure that we can draw out the general conclusion from this research sample to the population as a whole unit features. For this purpose finding conclusion techniques of inferential statistics must be considered which will enable us to find out population's features by directly observing only a portion (or sample) of the population. Sample of study was taken from selected private sector hospitals of Faisalabad.

Sample frame of the study was as follows:

1. Ali Hospital Chak Jhumra
2. Faisal Hospital Faisalabad
3. Mujahid Hospital Faisalabad
4. Saahil Hospital Faisalabad
5. Khadeeja Mahmood Hospital Faisalabad
6. National Hospital Faisalabad
7. Aziz Fatima Hospital Faisalabad
8. Mian Trust Hospital Faisalabad
9. Ali Hospital Jaranwala
10. Iqbal Chughtaii Hospital Jaranwala
11. Ravi Hospital Samundri
12. Aslam Memorial Zakriya Hospital Tandilanwala

If the investigation population was very small, we require studying a small part of it, which needs to be sufficient, to be the representative of the whole population. This process of the selection was known as a sample, and the selection process of the ingredients of the sample that will represent the whole of the population was known as a technique for sampling. It will help out in collecting data.

Convenience sampling is a form of the non-probability technique of sampling that consists of the sample close to hand, is being drawn/selected from that part of the population for the research. It is the most useful type of sampling for pilot testing. The sampling technique adopted in research is non-probability convenience sampling technique, as this technique has already used by Aagja and Garg (2010), Padma et al. (2010), Couralet et al. (2013), Alimana and Mohamad (2015) and Khodakarim et al. (2017) in their research work. In this study Hair's criterion (Hair et al., 2013) to calculate sample size, which suggests a sample size must be at least five times of the estimated parameters. 650 (5*103 parameters) questionnaires distributed among the patients of selected private sector hospitals of Faisalabad city, and as per Hair's criterion (Hair et al., 2013), as per the above-cited reference sample size would be considered sufficient for the current research.

The completed questionnaires collected to conclude the results from the patients. The data from patients were collected from August 2018 to November 2018. During the collection of the data, no major event happened in the organizations. Almost 650 questionnaires were distributed to the patients to collect data in order to meet minimum limit of sample size (Hair et al., 2013). The 551 questionnaires were retrieved out of 650 questionnaires; the retrieval percentage is 80%. These questionnaires were received from different patients receiving services from selected private sector hospitals.

3.6 Data analysis methods

Keeping in view resources and time restrictions, however in this study convenience sampling technique was used to collect data from the patients. Statistical Product and Service Solutions SPSS used for statistical analysis which is a Statistics software package. Formally this software name stands for Statistical Package for the Social

Sciences IBM SPSS provides statistical analysis, predictive modeling, data mining, decision management, and big data analytics. It was originally designed for the statistical analysis and management of social science data. In 1968 SPSS Inc., originally launched this product and later on was acquired by IBM in 2009. The data were analyzed by the use of SPSS version 22.0 (Statistical Product and Service Solutions) and Regression Analysis. (Shabbir et al., 2016) used this technique for analysis in his healthcare study.

3.7 Moderation

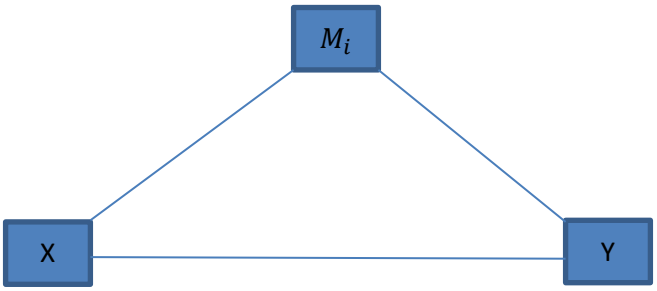
When the intensity of the relationship existing between two variables was impacted by a third variable, then moderation was carried out. This third variable (W), in predicting Y that interacted with X if the regression weight of Y on X changes as a process of W.

The simple regressions at conditional values of W of Y on X will also typically plot to expedite the analysis. The relationship between X and Y being moderated by W for various factors of W. This band can be easily plotted the interpretation of interaction to facilitate its effects (Preacher et al., 2006).

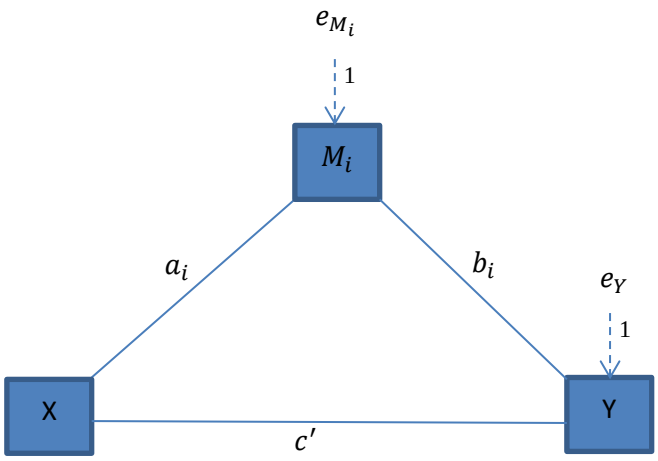
Model 4

Conceptual Diagram

Figure 2:Model 4



Statistical Diagram

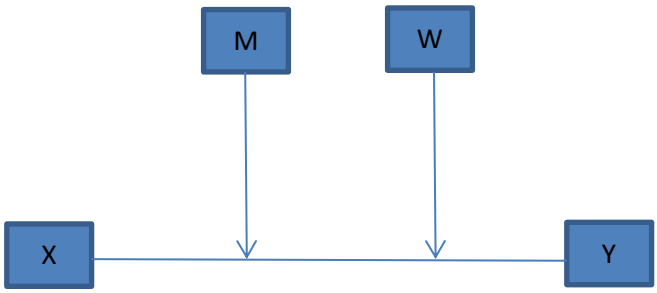


This model expressed the mediation analysis along with its basics as well as their analytical integration concerning conditional process analysis, by using Preacher Hayes moderation Model 4 with a focus on PROCESS version 3 for SAS and SPSS. This is mostly utilized in various research studies for evaluating direct and indirect impacts in single and multiple mediation models (parallel and serial). An Introduction to Mediation, Moderation, and Conditional Process Analysis, use of PROCESS was described and documented as published by The Guilford Press. PROCESS was explained by Andrew F. Hayes.

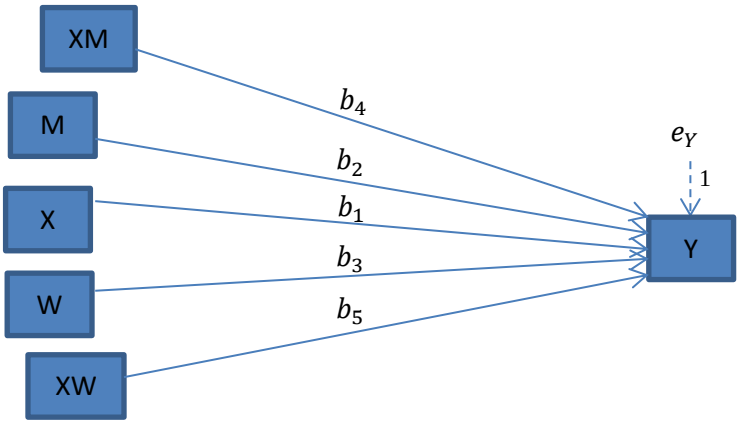
Model 2

Conceptual Diagram

Figure 3: Model 2



Statistical Diagram

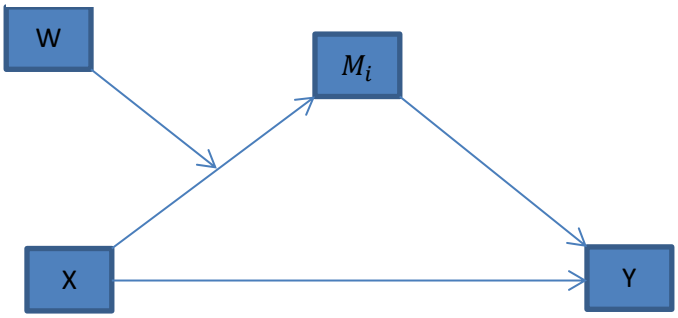


This model expressed the basics of the moderation analysis in the form of conditional process analysis along with its analytical integration, with the use of Preacher Hyes moderation Model 2 with a focus on PROCESS version 3 for SPSS and SAS. Sahoo, D., & Mitra, A. (2016) used Preacher and hayes mediation moderation models in his study.

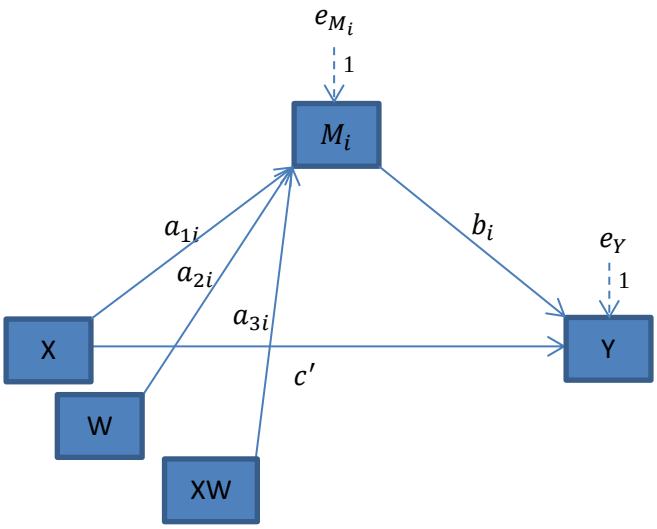
Model 7

Conceptual Diagram

Figure 4: Model 7



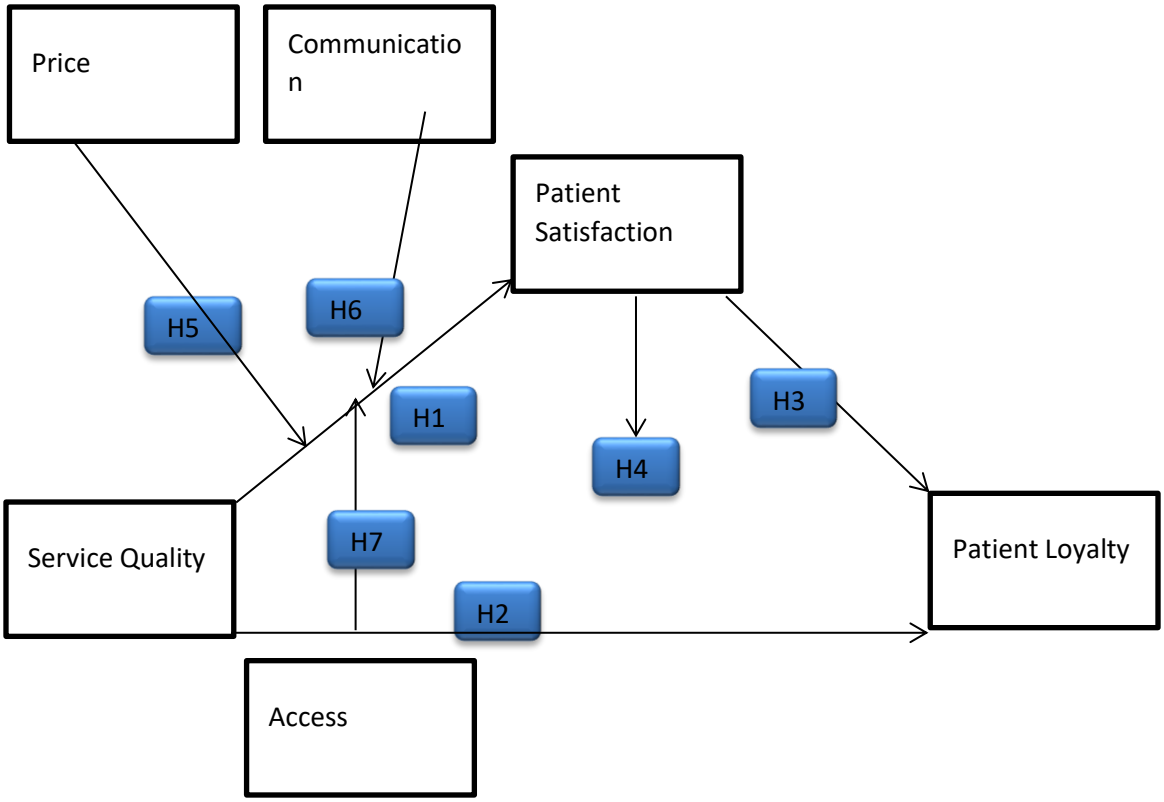
Statistical Diagram



In basic concept, moderated mediation occurs when an indirect impact is moderated, that is, this indirect impact varies across various levels of the impacting moderator. It is the interaction between X and W is indirect and both operations are carried out simultaneously (it is carried through M to Y). Hayes (2013).

3.8 Conceptual framework

Figure 5: conceptual Framework 1



3.9 Operationalization of variables

The data in this study was collected using an adapted questionnaire administered and developed by using various sources. All the items of the questionnaire were filled by the patient's i.e. Service Quality, Patient Satisfaction, Patient Loyalty, Price/cost of the Services, Patient-Doctor Communications and Access to the Health Facility have to be filled by the Patients. All questionnaire items were responded by the use of Five (05) Points Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Part A demographics include information of the patient (Name of Medical Facility, Gender, Qualification, Age, Job Level, and Province). Sahoo, D., & Mitra, A. (2016) used a Likert scale in their study.

3.9.1 Independent Variable

3.9.1.1 Service Quality

A variable by which another associated variable or process was caused or influenced called the independent variable. Mathematically its value is mostly given. Or in a process, it was the controlling factor (that is changed systematically) whose effect on the attitude of a dependent variable was observed as a controlled variable, explanatory variable, or the predictor variable.

Kondasani and Panda (2015) developed an instrument to measure service quality. In this study, the same instrument has adapted this scale in its original form. Service quality was measured with the use of five (05) latent variables (tangibility, reliability, responsiveness, assurance and empathy) with 39 questions. It was the observations of the patient's availed services from the healthcare facility and had measured by using five (05) Point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree).e).

3.9.2 Dependent Variable

It is a factor or function that was changed by the impact of a correlated factor was termed as the dependent variable. For example, the consumption was a dependent variable as caused, influenced and impacted by income earned another variable. Mathematically it is the variable which value was to be evaluated or desired in the equation or the model.

In this study, two dependent variables were used.

3.9.2.1 Patient Satisfaction

Mediator variable caused mediation between DV and IV. In other words, it elaborated on the association existing between DV and IV.

The mediation caused by the mediator variable developed a mediation model the flow of the process. In another way, the mediator variable had been supposed or assumed to cause the effect in the desired outcome variable and vice versa. In the psychology field, the mediator variable explained how internal psychological significance is affected by external physical events.

The mediation impacted or caused by the variable cannot be elaborated or defined statistically. On the other way or conflicting, statistics can be utilized to calculate a supposed meditation model developed by the mediator variable.

Kondasani and Panda (2015) developed an instrument for the evaluation of patient satisfaction. In this study, the same instrument has adapted in its original form for data collection. Patient satisfaction was measured with 14 questions. It was the perception of patients, who have availed the medical services of healthcare facility and was evaluated by using Five (05) Point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree).

3.9.2.2 Patient Loyalty

Kondasani and Panda (2015) developed an instrument for the measurement of patient loyalty. The same instrument has adapted in its original form for data collection. Patient loyalty was measured with 05 questions. It is the perception of patients, who have taken treatment from the healthcare facility and were evaluated by using Five (05) Point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree).

3.9.3 Moderator

Variable moderating the process is commonly represented by M. In this way, it is another variable that impacts the existing relationship between a DV and IV in such a way that the relationship becomes strong or weak. It may also affect the existing correlation between DV and IV.

In this study followings are the moderating variables:-

3.9.3.1 Price

Matzler, et al. (2007) developed an instrument for the measurement of price. In this study, the same instrument has adapted in its original form for data collection. Price was measured by using six (06) latent variables (price reliability, price transparency, relative price, price-quality ratio, price fairness, and price in general) with 23 questions. It is the perception of patients, who have attained the services from the healthcare facility and was evaluated by the use of Five (05) Point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Pantouvakis and Bouranta, (2014), cited it in their study.

3.9.3.2 Communication

Trumble et al. (2006) developed an instrument for the measurement of communication. In this study, the same instrument has adapted in its original form for data collection. Communication was measured with 10 questions. It is the perception of patients, who have availed the treatment from the healthcare facility and was evaluated by using Five (05) Point Likert scale ranging from 1 (Not at all) and 5 (Completely). Amin et al., (2013), cited it in their study.

3.9.3.3 Access

Owusu-Frimpong et al., (2010) developed an instrument for the measurement of access. In this study, the same instrument has adapted in its original form for data collection. Access was measured with 12 questions. It is the perception of patients, who have taken treatment from the healthcare facility and was evaluated with the use of Five (05) Point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Ali and Amin (2014), cited it in their study.

CHAPTER 04

RESULTS AND DISCUSSIONS

4. Research Philosophy

In this part of the thesis, the results of the investigation were concluded from the analysis of the collected data. This part of the thesis elaborated on the outcome of the investigations systematically without bias or interpretation. This part of the thesis included data which was collected, processed and analyzed for further investigation.

It comprised of results based on descriptive statistics, Cronbach alpha reliabilities, correlations and results of linear regressions, Preacher and Hayes mediation analysis Model 4and Preacher and Hayes moderation analysis Model 2 are represented in both narrative form and tabular forms. Moreover, discussion/ comparison of the study findings with standard values, it's managerial, organizational and academic implications with its strengths and limitations of the investigations, and future guidelines for researchers were also discussed. Shabbir et al. (2016) used this technique for analysis in their healthcare study.

Furthermore, to test the mediation and moderation results, Preacher and Hayes models were used. Sahoo, D., & Mitra, A. (2016) has already used Preacher and Hayes mediation moderation models in their research.

The major aim of the investigation was to quantify the influence of service quality on patient satisfaction and patient loyalty with mediating impact of patient satisfaction and moderating impact of price, communication and access in selected private sector hospitals of Faisalabad.

4.1 Population of Study

In this research study, original/primary data was adopted and collected for information analysis. Populations for the study were all the patients of private sector selected hospitals of Faisalabad. Samples for study collected conveniently from selected private

sector hospitals of Faisalabad. Similar research was conducted by Butt and Run, (2010) to consider Malaysian private healthcare sector services quality. The sample size was estimated to be 650 patients according to (Hair et al., 2013).

4.2 Sample and Procedure

The study targeted the patients taking treatment from these selected private sector hospitals of Faisalabad, which had age more than 20 years. A total of 650 questionnaires were distributed to the patients taking treatment from these selected private sector hospitals of Faisalabad.

Patients were requested to fill the questionnaire. They were assured to keep the privacy and secrecy of the facts. 99 patients did not answer the questionnaire and 551 questionnaires were collected out of total 650. The Business administration department issued a letter to the administration of these selected private sector hospitals of Faisalabad, requesting them to grant permission for the collection of the data. After receiving the letter of permission from the administration of these selected private sector hospitals, and then questionnaires distributed to the patients for data collection in these selected private sector hospitals of Faisalabad.

4.3 Data Analysis

According to Le-Compte and Schensul, research data analysis is a process used by researchers for reducing data to a story and interpreting it to derive insights. The data analysis process helps in reducing a large chunk of data into smaller fragments which makes sense.

Three major things take place during the data analysis process. The first data organization, the second, data reduction, which is done through summarization and categorization? It helps in finding patterns and themes in the data that can be easily identified and linked. Lastly, data analysis takes place, which can be done in both, top-down or bottom-up fashion.

Marshall and Rossman, on the other hand, describe data analysis as a messy, ambiguous, and time-consuming, but a creative and fascinating process through which a mass of collected data is brought to order, structure and meaning.

We can simply say that “the data analysis and interpretation is a process representing the application of deductive and inductive logic to the research and data analysis”.

4.3.1 Descriptive Statistics

Descriptive statistics of data was termed as the analysis of data that accommodates description; display summarizes data in a meaningful way for researchers. However, it does not allow to make conclusions beyond the data has rationally analyzed regarding any developed hypotheses of the research. In general to describe collected data this was an easy and simple way to represent an entire population or the entire data. It was further broken down to measure variability into central tendency. This measure includes median, mean and mode, while standard deviation, variance, kurtosis and skewness measure the variability for the data. Descriptive statistics were of key importance in displaying raw data in a very simple form, while it would be hard to visualize what the simple raw data was showing, trending and data validity especially if there was a lot of it. It simply enables us to display the data in a more convenient and meaningful way, which would be helpful in a simpler interpretation of the collected data.

Normality tests of data were used to find out whether the data set was normally distributed or not and to calculate up to what extent the underlying data set for a random variable was likely to be distributed normally. The symmetry of the collected data or the deficiency of symmetry of information was measured more precisely by the skewness. While the collected data was heavy-tailed or light-tailed related to a normal distribution, which was measured by kurtosis. The values between -2 and +2 are considered acceptable for asymmetry and kurtosis to validate a normal univariate distribution (George & Mallery, 2010).

The following table showed the descriptive statistics of the variables analyzed in the current research.

Table 4.1 Descriptive Statistics

Predictors	Mean	SD	Skewness	Kurtosis
Service Quality	3.876	0.255	0.461	1.99
Patient Satisfaction	3.582	0.397	0.235	1.035
Patient Loyalty	3.63	0.651	-0.19	0.508
Price	3.96	0.243	0.309	1.824
Communication Skills	3.628	0.522	0.228	1.443
Access to the Facility	3.45	0.464	0.492	1.098

Table 1: Descriptive Statistics

4.3.2 Demographic Variables

A demographic variable includes the personal testimonial of an individual like gender, education level and age. Normally such demographic variables as an important input for the marketing department of business while planning to target customer profiles for the sale of the product and for the retention of the customer to maintain their future profitability. In this study, while designing a research survey, this research process needed to assess the overall study who to conduct the survey process and how to manage overall survey response collected data into feasible and meaningful groups of respondents. Demographic considerations were the major and vital source for both assessments. In under mentioned tables, such type of demographic distribution of the variables gathered in the questionnaire was displayed. The distribution included different parts which were Gender, Qualification, Age group and Job level.

Gender (male and female) was being the state about the cultural and social roles that were considered to be appropriate for men and women. It is illogical, unethical and illegal to discriminate on such grounds. Women and men were a socially constructed definition of gender.

Table 4.2 Gender

Gender	Frequency	Percent	Cumulative Percent
Female	213	38.7	38.7
Male	338	61.3	100

Table 2: Gender

Qualification was the knowledge, Capacity, or acquired skill that fulfills the basic requirements of an occasion. It denoted fitness for a specific purpose after fulfilling all the basic necessary standards and conditions. It did not necessarily tag with candidate competence. In this study respondents with a four-year degree at a college might be in a good position to answer questions than that of those whose education level was not up to mark. Qualified respondents have an entirely different mindset and vision as compared to non-qualified ones.

Table 4.3 Qualification

Qualification	Frequency	Percent	Cumulative Percent
Matric	90	16.3	16.3
Inter	255	46.3	62.6
Graduation	164	29.8	92.4
Master	42	7.6	100

Table 3: Qualification

An age group of people was an indication of a group of people who were born during a particular period in a place or organization. In the population distribution by age was an important and vital demographic grouping.

Table 4.4 Age Group

Age Group	Frequency	Percent	Cumulative Percent
20-25	80	14.5	14.5
26-30	95	17.2	31.7
31-35	103	18.7	50.4
36-40	112	20.3	70.7
40 and Above	161	29.3	100

Table 4: Age Group

Job levels were the distribution of powers, cadres of authority in firms. Each job level was associated with a specific salary range, job description and a different series of job titles. Jobs levels can be grouped into various areas. The undermentioned were the following common job levels. Managerial level means the company roles responsible for employee work performance and productivity. The job level of the respondent has a

strong impact on the vision and commitment of an individual. In the study of the demographic variables of the job, the level was very important.

Table 4.5 Job Level

Job Level	Frequency	Percent	Cumulative Percent
Worker	313	56.8	56.8
Supervisor	161	29.2	86
Manager	64	11.6	97.6
Sr. Management Level	13	2.4	100

Table 5: Job Level

4.3.3 Reliability

Reliability referred a consist degree of measurement. A test performed would be considered reliable when it answered the same repeated reading under the same specific conditions. Reliability occurred when an experiment or research investigation was performed repeatedly under the same specific conditions the results of the data were the same or nearly the same as previous experiments with the same variables. However, if some experiment of research was carried out for 100 times and the answer received was the same every time then it would indicate that our hypothesis and research was reliable and can, therefore, be referenced or used as in the future scientific study. The reliability of a variable was verified by the use of Cronbach's alpha coefficient, to validate each factor and the whole of the developed instrument. Up to what extent the concordant results were gathered for each element understudy when regularly monitored was called reliability itemized or whole of the developed instrument. Nunally (1988) explained reliability as a tool capability to produce reliable results in the same conditions. The most widespread measures of reliability were test-retest and internal consistency. If a single tool designed for evaluation remained to a particular class of responding individuals for the validity of the internal system reliability method was eligible for evaluating reliability (Trochim, 1999). Commonly used reliability coefficient to measure internal consistency was Cronbach's Alpha measure (1951). The value of the coefficient varies from 0 to 1. Hair et al. (1998) mutually agreed upon its lowest value for Cronbach's Alpha is 0.959.

Table 4.6 Result of Reliability

Name of the variable	Cronbach's Alpha
Tangibility	0.708
Responsiveness	0.710
Reliability	0.707
Empathy	0.704
Assurance	0.706
Patient Satisfaction	0.713
Patient Loyalty	0.705
Price Reliability	0.718
Price Transparency	0.702
Price Reliability	0.709
Price Quality Ratio	0.703
Price Fairness	0.700
Price in General	0.720
Communication	0.701
Access	0.698

Table 6: Result of Reliability

4.3.4 Correlation Analysis

It was used to evaluate the degree up to what degree of extent two or more variables value varies simultaneously in a process. The degree up to what extent these variables (increase or decrease) in parallel as indicated by positive correlation. The degree up to what extent the variable value varies (increases as the other decreases) was indicated by a negative correlation.

In other words, the degree up to what extent a change in the value of one variable predicts the change in the value of another variable. A significant relationship existing between service quality, patient satisfaction, patient's loyalty and the moderating effect of the price of the service, patient-doctor communications and access to the healthcare facility was checked by correlation analysis. The value of the variable was varied (increases or decreases) in tandem in positively correlated variables, (Boslaugh, 2012). In other words, the test measures the degree of significance of association exiting between variables.

The ANOVA was only the method that supported in evaluating the existing difference between different sample means. If in the analysis only two different means were to be

compared then independent samples means the method could be utilized to achieve the desired results. Independent Samples t-test was utilized to check the degree of variation in patient satisfaction and patient's loyalty at the same level of service quality of patients depending on the variation in age, gender, qualification and types of job status. The two-sample (independent groups) t-test was utilized for the determination of whether the unknown means of two populations were different from each other in comparison to their results based on independent samples selected from each population. On the other way if the means of these samples differ from each other, then this would be the indication that means of the population were confirmed to be different from each other.

Table 4.7 Result of Correlations

Variables	M	SD	**1**	**2**	**3**	**4**	**5**	**6**
Service Quality	-	-	1					
Patient Satisfaction	-	-	0.64**	1				
Patient Loyalty	-	-	0.71**	0.50**	1			
Price	-	-	0.74**	0.38**	0.59**	1		
Communication	-	-	0.59**	0.58**	0.48**	0.43**	1	
Access	-	-	0.59**	0.60**	0.48**	0.44**	0.89**	1

Table 7: Result of Correlations

****P<0.01, *P<0.001, Service Quality=Five SERVQUAL Factor, Patient Satisfaction=Attained Satisfaction, Patient Loyalty=Loyalty Attained, Price=Cost Paid, Communication Skills= Patient Doctor Communication, Access to the Facility=Access to Healthcare Facility.**

4.3.5 Regression Analysis

A basic and commonly used type of predictive analysis was linear regression. Its overall theme was to examine the following two things:

- Did a good job do by a set of independent variables to extract an outcome (dependent) variable?
- In particularly which variables were significant predictors to extract dependent variable and in which way did they displayed by the sign of the beta estimates and magnitude impacting the outcome (dependent) variable?

The existing association between one dependent variable and one or more independent variables were explained by these regression estimates. It was a powerful statistical tool that facilitated the researcher to analyze the existing association existing between two or more variables of desire. The hypothesis of the research was also tested through linear regression analysis. By this analysis impact of an independent variable on the dependent variable was tested keeping in view the constant impact of other variables. The itemized involvement of each variable can also be identified by the linear regressions, while other independent variables changes were controlled. It has the following assumptions:

- There must be a linear association existing between the independent variables and the outcome variable.
- Multivariate Normality– it was considered that residuals were normally distributed which was the regression assumption.
- No Multicollinearity— regressions assume that the IV's were not highly correlated and integrated.
- Homoscedasticity–This assumption states that across the various values of the independent variables the term of the difference of error was similar.

Table 4.8 Results of Regression

Predictors	R	R Squares	Coefficient of Beta	F	Sig.
Service Quality	0.642	0.412	0.642**	384.01	0.00
Patient Satisfaction	0.503	0.253	0.503**	185.77	0.00
Patient Loyalty	0.711	0.505	0.711**	561.66	0.00

Table 8: Results of Regression

***P<0.05, **P<0.01, *00P<0.001,**

H1: Service quality has a significant impact on a patient's satisfaction.

Study results explored that service quality has a significant positive relationship (β=0.642, Sig<0.01) with the patient's satisfaction. Hence hypothesis H1 service quality was significantly correlated with patient satisfaction, which was accepted.

H2: Service quality has a significant impact on a patient's loyalty.

Research results showed that service quality has a significant positive relationship (β=0.503, Sig<0.01) with a patient's loyalty. Hence hypothesis H2 service quality was positively associated with patient's loyalty, which was accepted.

H3: Patient satisfaction has a significant impact on patient loyalty.

Research results explored that service quality has a significant positive relationship (β=0.711, Sig<0.01) with a patient's loyalty. Hence hypothesis H3 service quality was positively associated with patient's loyalty, which was accepted.

4.3.6 Preacher and Hayes Moderated Mediation Analysis Model 2

In statistics and regression analysis, when a third variable impacted the relationship existing between two variables then moderation occurred. The third variable was termed as a moderator variable by which the relationship was impacted. Its effect was characterized statistically as an interaction done by the moderator; that could be a categorical (e.g., class, sex and ethnicity) or quantitative (e.g., Pay level) moderator variable affected the direction of relationship strengthen or weaken the relationship between independent and dependent variables.

The mediation impact of X's on Y through a mediator variable M was moderated if the indirect effect of X variable depended on a fourth variable, Hayes (2015).

4.3.7 Preacher & Hayes Moderation Model 02 Price Communication and Access

Table 4.9 Results of Moderation Analysis

Predictor	Co-eff	Se	T	p	LLCI	ULCI
Constant	3.586	0.013	278.309	0.000	3.561	3.612
Service Quality	0.928	0.079	11.754	0.000	0.773	1.083
Price	-0.256	0.075	-3.407	0.0007	-0.4	-0.1
Communication	0.23	0.029	7.997	0.000	0.174	0.287
Access	0.296	0.032	9.336	0.000	0.234	0.359
Int_1	-0.531	0.138	-3.85	0.0001	-0.8	-0.26
Int_2	0.255	0.067	3.774	0.0002	0.122	0.387
Int_3	0.313	0.079	3.958	0.0001	0.158	0.469

Table 9: Results of Moderation Analysis

Table 4.10 Conditional Effects of the Focal Predictor

Price	Communication	Effect	Se	T	p	LLCI	ULCI
-0.16	-0.428	0.904	0.081	11.102	0	0.744	1.064
0.04	0.072	0.925	0.079	11.675	0	0.769	1.081
0.106	0.372	0.966	0.081	11.867	0.001	0.806	1.126

Table 10: Conditional Effects of the Focal Predictor

Table 4.11 Conditional Effects of the Focal Predictor

Price	Access	Effect	Se	t	P	LLCI	ULCI
-0.16	-0.367	0.861	0.08	10.713	0	0.7034	1.019
0.04	0.05	0.872	0.078	11.192	0	0.719	1.025
0.106	0.383	0.937	0.08	11.714	0	0.78	1.094

Table 11: Conditional Effects of the Focal Predictor

H5: Price as moderator has a significant impact on the relationship between service quality and patient satisfaction when the price is low patient satisfaction is high and when the price is high patient satisfaction is low.

Study results showed that the impact of price as a moderator on the association existing between service quality and patient satisfaction was significant (negative) (Coeff= -0.531, P=0.0001). Hence hypothesis H5 the impact of the price as moderator was negatively associated (inversely proportional) with the patient satisfaction or if the price was low patient satisfaction is high, when the price was high patient satisfaction is low, which was accepted.

H6: Communication as moderator has significant impact on the relationship between service quality and patient satisfaction, when communication is effective patient satisfaction will be high and when communication is ineffective patient satisfaction will be low.

Study results showed that the impact of communication as a moderator on the existing association between service quality and patient satisfaction was significant (positive) (Coeff= 0.2545, P=0.0002). Hence hypothesis H6 the impact of the communication as moderator was positively associated (directly proportional) with the patient satisfaction or if communication was effective patient satisfaction was high or when communication was ineffective patient satisfaction was low, which was accepted.

H7: Access as moderator has a significant impact on the relationship between service quality and patient satisfaction when access is easy patient satisfaction will be high and when access is hard patient satisfaction will be low.

Study results showed that the impact of access to the facility as a moderator on the existing association between service quality and patient satisfaction was significant (positive) (Coeff= 0.3132 P=0.0001). Hence hypothesis H7 the impact of the access as moderator was positively associated (directly proportional) with the patient's satisfaction or if access was easy patient satisfaction was high or when access was hard patient satisfaction was low, which was accepted..

4.3.8 Preacher & Hayes Mediation Model 04

A mediation model was one that identified and elaborates the procedure that underlies an expected existing association between two variables (independent and dependent variable) with the involvement of a third hypothesized variable, which was termed as a mediator variable. A mediation model suggests that the independent variable impacts the (non-observable) mediator variable, apart from a direct causal existing association between both (IV & DV) variables, the dependent variable impacted in the response of it. Thus, it performed the function to clarify the existing relationship between both the (IV & DV) variables. This process was operated to explore an existing known association by understanding the undergone procedure by which a mediator variable, one variable

impacts another variable by its impact. It would also be helpful in better consideration of the existing association between the variables (IV & DV) when a definite connection between the variables was not appearing. Then they were observed by procedures of operational descriptions and apart from this have no existence. This model describes the foundation of mediation analysis along with their analytical integration in the form of conditional process analysis, by using Preacher Hayes moderation Model 4 with a focus on PROCESS version 3 for SPSS and SAS.

Table 4.12 Preacher and Hayes Mediation Model 04

Predictor	Coeff	Se	t	p	LLCI	ULCI
Constant	-3.37	0.298	-11.34	0.000	-3.95	-2.78
Service Quality	1.687	0.1	16.929	0.000	1.491	1.883
Patient Satisfaction	0.13	0.064	2.03	0.042	0.004	0.256

Table 12: Preacher and Hayes Mediation Model 04

Table 4.13 Total and Direct Effect of X on Y

Effect	Se	T	P	LLCI	ULCI	C_Ps	C_Cs
1.817	0.077	23.699	0	1.666	1.968	2.791	0.711
1.687	0.1	16.929	0	1.491	1.883	2.592	0.66

Table 13: Total and Direct Effect of X on Y

H4: Patient satisfaction as a mediator has a significant impact on the relationship between service quality and patient loyalty.

Study extracts showed the mediation impact of patient satisfaction on the existing association between service quality and patient loyalty was significant (positive) (Coeff= 0.130 P=0.042). Hence hypothesis H4 patient satisfaction as a mediator has a positive impact on the existing association between service quality and patient loyalty which was accepted.

4.3.9 Preacher & Hayes Moderation and Mediation Model 07

It is the basic concept, moderated mediation process occurred when an indirect impact was moderated, that was, its indirect impact which varies across various levels of the including moderator. Mediated moderation was in process when the association between X and W was indirect (it is carried to Y variable through M variable). Hayes (2013).

Table 4.14 Precher and Hayes Moderation Mediation Model 7

Predictor	Coeff	Se	T	p	LLCI	ULCI
Constant1	3.596	0.013	263.227	0.000	3.569	3.623
Constant2	3.575	0.129	276.423	0.000	3.549	3.601
Constant3	3.576	0.013	278.893	0.000	3.551	3.601
Service Quality1	1.213	0.752	16.136	0.000	1.065	1.361
Service Quality2	0.714	0.06	11.877	0.000	0.596	0.832
Service Quality3	0.682	0.059	11.504	0.000	0.566	0.799
Price	-0.307	0.079	-3.886	0.000	-0.462	-0.152
Communication	0.243	0.029	8.231	0.000	0.185	0.301
Access	0.298	0.033	9.079	0.000	0.233	0.362
Int_1	-0.298	0.109	-2.712	0.007	-0.513	-0.082
Int_2	0.091	0.052	1.745	0.000	-0.011	0.193
Int_3	0.087	0.059	1.464	0.143	-0.029	0.204

Table 14: Preacher and Hayes Moderation Mediation Model 7

Table 4.15 Conditional Effects of the Focal Predictor

Predictor	Limit	Effect	Se	t	p	LLCI	ULCI
Price	-0.16	1.261	0.075	16.797	0.000	1.113	1.408
	0..397	1.201	0.076	15.839	0.000	1.052	1.35
	0.106	1.181	0.078	15.247	0.000	1.029	1.334
Communication	-0.428	0.675	0.063	10.719	0.000	0.552	0.799
	0.072	0.721	0.061	11.923	0.000	0.602	0.839
	0.372	0.748	0.064	11.657	0.000	0.622	0.874
Access	-0.366	0.845	0.049	12.114	0.000	-0.002	0.189
	0.499	0.892	0.051	11.202	0.000	-0.002	0.197
	0.383	0.93	0.054	10.643	0.000	-0.002	0.208

Table 15: Conditional Effects of the Focal Predictor

4.4 Summary of Accepted / Rejected Hypothesis

Hypothesis	Statement	Results
H1:	Service quality has a significant impact on patient's satisfaction	**Accepted**
H2:	Service quality has a significant impact on patient's loyalty	**Accepted**
H3:	Patient satisfaction has a significant impact on patient's loyalty	**Accepted**
H4:	Patient satisfaction as mediator has a significant impact on the relationship between service quality and patient's loyalty	**Accepted**
H5:	Price as moderator has a significant impact on the relationship between service quality and patient's satisfaction, when price is low patient satisfaction is high and when price is high patient's satisfaction is low	**Accepted**
H6:	Communication as moderator has a significant impact on the relationship between service quality and patient's satisfaction, when communication is effective patient's satisfaction will be high and when communication is ineffective patient satisfaction will be low	**Accepted**
H7:	Access as moderator has a significant impact on the relationship between service quality and patient's satisfaction, when access is easy patient satisfaction will be high and when access is hard patient satisfaction will be low	**Accepted**

Table 16: Summary of Accepted / Rejected Hypothesis

4.5 Summary of Results

The value of Cronbach's Alpha was evaluated to validate the internal authenticity of the variables the results were accepted as the value of our analysis lies within the acceptance range, as can be seen in Table 4.5. The inter variable's accuracy of the variables was commonly measured by the reliability coefficient. The value of the coefficient varies from 0 to 1 (Hair et al. (1998) claimed that the lowest value for Cronbach's Alpha is 0.959 upon which most of the researchers agreed).

The bivariate correlations were analyzed; the result values were accepted as significant at $p \leq 0.01$. As indicated in Table 4.7, the service quality were significantly positively related to patient satisfaction ($r = 0.642$), patient loyalty ($r = 0.711$), price ($r = 0.743$),

communication skills (r = 0.598) and significantly positive correlated with access to the medical facility (r = 0.596).The mediator patient satisfaction was positively correlated with patient loyalty (r = 0.503), and service quality (r = 0.642). The moderator price was significantly positively correlated with patient satisfaction (r = 0.384) and significantly positively correlated with patient loyalty (r = 0.590). The moderator communication skills were significantly positively correlated with patient satisfaction (r = 0.584) and significantly positively correlated with patient loyalty (r = 0.483). The moderator access to the medical facility/hospital was significantly positively correlated with patient satisfaction (r = 0.603) and significantly positively correlated with patient loyalty (r = 0.478).

In this study to check hypothesis regression analysis was used. The impact of IV on the DV was tested through this analysis while considering other variables remained constant.

ANOVA results of Table 4.8 indicate that the existing association between the quality of the service and the patient's satisfaction was positively significant (Sig = 0.000, $p \leq 0.05$). The association between service quality and patient's loyalty was positively significant (Sig = 0.000, $p \leq 0.05$). The existing association between patient loyalty and patient's satisfaction was positively significant (Sig = 0.000, $p \leq 0.05$). The impact of the total model was positively significant.

The moderation analysis was conducted by using Preacher and Hayes (2008) mediation and moderation analysis model 2 in Table 4.9. This method used/adopted indicates an estimate at a 95% confidence interval of the indirect effect. When zero value was not in the confidence interval it indicates that indirect effect was significant, different from zero at $p<0.05$ as the value of p=.001.

The moderator Price was negatively significant which indicates that the relationship of patient satisfaction and price was negative (Price increases patient satisfaction decreases and vice versa). When zero value was not in the confidence interval it indicates that indirect effect was significant, different from zero at $p<0.05$ as the value of p=.000.

The moderator Communication was positively significant which indicates that the relationship of patient satisfaction and communications were positive (Communication becomes effective patient satisfaction increases and vice versa). When zero value was not in the confidence interval it indicates that indirect effect was significant, different from zero at $p<0.05$ as the value of p=.000.

The moderator Access to the medical facility was positively significant which indicates that the relationship of patient satisfaction and Access to the medical facility was positive (Access to the medical facility becomes easy patient satisfaction increases and vice versa).

The mediation analysis was conducted by using Preacher and Hayes (2008) mediation and moderation analysis model 4 in Table 4.12. This method used/adopted indicates an estimate at a 95% confidence interval of the indirect effect. When zero value was not in the confidence interval it indicates that indirect impact was significant, apart from zero at $p<0.05$ as the value of p=.0428. The mediator patient satisfaction was positively significant which indicates that the patient's satisfaction has a positive mediating effect on the existing association of service quality and patient loyalty. (Increased Patient satisfaction will cause increases patient loyalty and vice versa).

4.6 Discussion

The hypothesis results of the investigation were in summarized form in the result part of the study which, were tested. Altogether this study has provided significant response to the research queries, namely, whether any association existing between service quality and patient's satisfaction and patient's loyalty, any association between patient's satisfaction and patient's loyalty, whether patient's satisfaction was mediating the relationship between service quality and patient's loyalty at high and low price, effective and ineffective communication and easy and hard access to the medical facility.

The present study showed that the main effects of the hypothesis were supported.

The results explored that the quality of service had a positive impact on patient satisfaction and patient loyalty. Price as a moderator has a positive impact on the

association between service quality and patient satisfaction when the price was low patient satisfaction was high and when the price was high patient satisfaction was low. Communication as a moderator has a positive effect on the existing association between service quality and patient satisfaction when communication was effective patient satisfaction was high and when communication was ineffective patient satisfaction was low.

Access as a moderator also has a positive effect on the existing association between service quality and patient satisfaction, when access was easy patient satisfaction was high and when access was hard patient satisfaction was low.

Research Question 1

What is the existing relationship existing between service quality and patient satisfaction?

Service quality has a positive influence on the patient's satisfaction. Question 1 was hypothesized, information collected and analyzed by Software SPSS. The results of the study were consistent and in accordance with the existing study of the researcher, they explored that service quality performance analysis has positive influence on the patient's satisfaction and patient's loyalty in the sector of healthcare (Shabbir et al., 2016; Park et al., 2016), (Gronroos, 1990), (Subramanian et al., 2014), (Kotler et al., 2006) and (Al-Borie and Sheikh Damanhouri, 2013; Zarei et al., 2015).

Research Question 2

What is the relationship existing between service quality and patient loyalty?

Service quality has a significant impact on patient loyalty. Question 2 was hypothesized, information collected and analyzed by Software SPSS. The results of study were consistent and in accordance with the existing study of the researchers, they explored that patient's satisfaction level is mostly used instrument in the sector of the healthcare to measure service quality (Fenton et al., 2012; Shabbir et al., 2016), (Azizan and Mohamed, 2013), (Leiter et al. (1998) and (Manaf et al. 2012).

Research Question 3

What is the relationship existing between patient satisfaction and patient's loyalty?

Patient satisfaction has a positive influence on patient's loyalty. Question 3 was hypothesized, information collected and analyzed by Software SPSS. The results of the study were consistent and in accordance with the existing study of the researchers, they concluded that patient satisfaction and patient's loyalty are positively interrelated (Hu et al. 2011) and (Mortazavi et al. 2009).

Research Question 4

Does patient satisfaction mediate the relationship existing between service quality and patient loyalty?

Patient satisfaction as a mediator has a positive influence on the existing association between service quality and patient loyalty. Question 4 was hypothesized, information collected and analyzed by Preacher and Hayes mediation moderation analysis. The research results were consistent and in accordance with the existing study of the researchers, they explored that to attract new customers as it requires more effort and resources rather than to retain/continue existing ones (Fornell, 1992), (Roberge et al., 2001), (Ranaweera and Prabhu, 2003), (Kessler and Mylod, 2011) and (Varki and Colgate, 2001).

Research Question 5

Does price impact the relationship existing between service quality and patient satisfaction in such a way that when the price is low patient satisfaction is high and when the price is high patient satisfaction is low?

Price as a moderator has a positive influence on the existing association between service quality and patient satisfaction, when the price of service was low patient satisfaction was high and when the price was high patient satisfaction was low. Question 5 was hypothesized, information collected and analyzed by Preacher and Hayes mediation moderation analysis. The results of the study were consistent and in accordance with the

existing study of the researchers, they explored satisfied clients are more likely to accept price variation (less elastic price), that might increase profitability (Beerli et al., 2004) and (Dabholkar et al. 1996).

Research Question 6

Does patient and doctor communication impact the relationship existing service quality and patient satisfaction in such a way that when communication is effective patient satisfaction is high and when communication is ineffective patient satisfaction is low?

Communication as a moderator has a significant impact on the existing association between service quality and patient satisfaction when communication is effective patient's satisfaction will be high and when communication is ineffective patient satisfaction will be low. Question 6 was hypothesized, information collected and analyzed by Preacher and Hayes mediation moderation analysis. The results of the study were consistent and in accordance with the existing study of the researchers, they explored consultant and patient communication was a vital, important and very sensitive procedure with many aspects, including the planned procedure in where patients and doctors consider specific situational environment in which care is provided to the patients (Caiata-Zufferey and Schulz, 2012; Levinson et al., 2010; Street et al., 2007), (Lim and Tang, 2000),(Buxton, 2013), (Mercieca et al., 2014) and (Zarei (2015).

Research Question 7

Does access to medical facilities impact the relationship existing between service quality and patient satisfaction in such a way that when access is easy patient satisfaction is high and patient satisfaction is low when access is hard?

Access as moderator has a positive influence on the existing association between service quality and patient satisfaction when access was easy patient satisfaction was high and when access was hard patient satisfaction was low. Question 7 was hypothesized, information collected and analyzed by Preacher and Hayes mediation moderation analysis. The results of the study were consistent and in accordance with the existing study of the researchers, they explored that access to the healthcare facility was termed to

had the easy availability and prompt use of personal healthcare services in order to attain best suitable health outcomes (IOM, 1993) in order to attain good and easy access to healthcare facility required three discrete steps: Gained easy entry into the healthcare facility. Getting an easy approach to the sites of healthcare from where patients could receive desired medical-related material and services. Access, is the process of healthcare, was easy accessibility, timely availability and proper accommodation of the healthcare services, when desired and were described as patient-physician number of contacts to coup up the problems (Turner and Pol, 1995), (Bowers et. al., 1994; Hall and Press, 1996; Levis, 1994; Hopton et. al., 1993), (Handler et. al., 1998; Mckinley et. al., 1997) and (Hall and Dornan, 1988; Piette, 1999; Ross et. al., 1993).

CHAPTER 05

CONCLUSION AND RECOMMENDATIONS

5. Findings of the study

The following chapter consists of conclusions and recommendation keeping into consideration the outcomes of the study. This chapter also comprised of the study implications in terms of managerial implication, organizational implication and academic implication. The strengths, limitations, delimitations and future recommendations are also included in the chapter. The last section of this chapter is comprised of the conclusion of the overall study which aids derived from the study.

This research has investigated the influence of service quality on patient satisfaction and patient's loyalty, with price, communication and access as moderators, patient satisfaction as a mediator in the selected private sector hospitals of Faisalabad. Furthermore, the relationship existing between service qualities, patient satisfaction and patient's loyalty had been investigated. Furthermore, the variance in relationship existing between service quality and patient satisfaction at different price levels, at effective and ineffective patient-doctor communication and at easy and hard access to healthcare centers has also observed in the selected Faisalabad private healthcare sector. This chapter has discussed the concluding remarks from this research work and recommendations. The basic findings of the investigation were as follows;

- The influence of service quality on patient's satisfaction was positive and significant.
- The impact of service quality service on patient loyalty was positive and significant.
- Impact of patient Satisfaction on the loyalty of the patient was positive and significant.
- Patient satisfaction as a mediator has a positive significant impact on the existing association between service quality and patient's loyalty when patient satisfaction

is high patient's loyalty or retention of the patient was high and when patient satisfaction was low patient loyalty or patient retention was low.

- Price as a moderator has a negative significant influence on the existing association between service quality and patient satisfaction, when the price was low patient satisfaction was high and when the price was high patient satisfaction was low.
- Communication as a moderator has a positive significant influence on the existing association between service quality and patient satisfaction when communication was effective patient satisfaction was high and when communication was ineffective patient satisfaction was low.
- Access as moderator has a positive significant impact on the existing relationship between service quality and patient satisfaction when access was easy patient satisfaction was high and when access was hard patient satisfaction was low.

5.1 Conclusion

This study paper had explored the proposed association or influence of service quality on patient satisfaction and patient loyalty with moderating impact of the price, communication and access and patient satisfaction impact as a mediator. Service quality was instituted by Parasuraman et al. (1985) for service execution evaluation, consisted of five dimensions (Tangibility, Reliability, Responsiveness, Assurance and Empathy).

Satisfaction, which was the assumed variance between before and after observation and execution of the services performed, drives users for the utilization of these types of services for the same/different healthcare issues (Sardana, 2003), based on one dimension (Patient Satisfaction). (Hausman, 2004).

Anbori et al. (2010) elaborated on the patient's loyalty as some strategic services planned to attain clients in the future by giving them superior service quality, based on one variable (Patient Loyalty).

The price factor was used mutually with convenience and segregated from it (Lim and Tang, 2000) and quality of the services might be used to elaborate customer's satisfaction

based on six factors/variable (Price Reliability, Price Transparency, Relative Price, Price Quality Ratio, Price Fairness and Price in General).

Effectiveness of communication of consultant and patient was the basic foundation of empathetic and capable healthcare facilities and a vital part of the higher healthcare service quality and patient's satisfaction (Kaplan et al., 1989; Levinson et al., 2010; Levinson and Pizzo, 2011; Swenson et al., 2004) based on one variable / factor (Patient-Doctor Communication).

Access as the factor of caring was the easy approach, ready availability and required accommodations of the healthcare services, when they are needed and was explored as visits of the patient and consultants relations (Turner and Pol, 1995) based on one variable/factor (Access to the Healthcare Provision).

Much of service quality performance analysis concludes that the influence of service quality on patient satisfaction and patient's loyalty in the healthcare sector was significant (Shabbir et al., 20I6; Park et al., 20I6). The positive and significant influence of service quality on the patient's satisfaction and patient's loyalty in the healthcare sector has already been studied by researchers, as we have also hypothesized in our study.

In most of these studies, some important factors/aspects like cost/price of service were not addressed (keeping view patient income/affordability/purchasing power etc.). Pantouvakis and Bouranta, (2014) find out that evident indicator supported by the qualitative and empirical facts clearly indicated that client's satisfaction and service quality were multivariable or factors, in which quality contents, along with the cost factor and convenience, impact patient satisfaction, patient-doctor communication (key factor in diagnosing disease and its appropriate treatment/medication to coup up the problem) Trumble et al. (2006) Patient's satisfaction as proved by the analysis that to shift to the full satisfaction level with consultant communication competencies and complete satisfaction with the medical-related issues and access / location of hospital/medical facility (geographical access, transport availability and generally familiar area make it easy to reach).

Access/location of hospital/medical facility (geographical access, transport availability and generally familiar area make it easy to reach or access to avail the desired treatment or medical services) Owusu Frimpong et al., (2010) explored the results collected from public and private sector healthcare users and their access related experiences revealed varying. Narang and Sharma (2011) also investigated gender differences and approaches. They pointed out that for the delivery of healthcare services and monetary aspects and access to the healthcare facility, this might have a significant positive impact on its prospective among men. While among women, it was the delivery of the healthcare and healthcare personnel's dealing and required drug availability. This factor was reproduced in the investigation findings. While on the other hand, women were found to be sensitive, expecting empathy and sympathy at the place of treatment or health facility from the service providers. Zarei (2015) identified eight factors of basic healthcare service quality including consultant's consultation, physical environment, patients required information, cost of the service and the efficacy of the services of the administrative staff. In this regard, investigators are agreed that the basic healthcare quality of the services is a multi-functional perspective.

Therefore, access problems to the healthcare facilities were positive and significant and required consideration by both the management and providers of the healthcare services for the betterment of service quality along with its delivery and patient satisfaction. Private sector healthcare users feel comfortable while taking healthcare services from the public healthcare facilities in a short time period, having higher satisfaction levels, extended, and flexible working hours for the attainment of better treatment with less inconvenience, are not considered in these studies.

This study has addressed above mentioned three important factors and their moderating influence on service quality, patient satisfaction and patient's loyalty. In this research service quality was taken as an independent variable. Patient satisfaction and patient loyalty were used as dependent variables. Existing association between service qualities, patient satisfaction and patient's loyalty will be evaluated. Furthermore, the change in the existing relationship between service quality and patient's satisfaction at different price

levels, at effective and ineffective patient-doctor communication and at easy and hard access of healthcare Centre had also observed in Faisalabad healthcare sector.

5.2 Discussion

The study has examined the existing relationship between service quality and patient satisfaction and the relationship between service quality and patient loyalty. The study has also examined the existing association between the patient's satisfaction and the patient's loyalty.

Furthermore, in this investigation, we have tried to investigate the mediation effect of the patient's satisfaction between the existing relationships between service qualities and patient' loyalty. This study guided us up to what extent price interact with service quality and its influence on patient's satisfaction in such a way that when price was low patient satisfaction was high and when price was high patient satisfaction was low, how much patient-doctor communication interact with service quality and influence patient's satisfaction in such a way that when communication was effective patient satisfaction was high and when communication is ineffective patient satisfaction was low and in which way access to hospital / medical facility interact with service quality and its influence on patient's satisfaction in such a way that when access was easy patient satisfaction was high and patient satisfaction was low when access was hard.

This study used patient satisfaction and patient's loyalty as the dependent variable and service quality as an independent variable. This investigation also analyzed the mediation role of the patient satisfaction and moderation role of price, communication and access to the medical facility/hospital. Different researchers worked out to evaluate the existing association between service quality, patient satisfaction and patient's loyalty with the moderation impact of price, communication and access to the medical facility/hospital and mediation role of patient satisfaction.

The present study shows that the main effects of the hypothesis are supported. The results clearly exposed that service quality has a significant influence on patient satisfaction and loyalty. Price as moderator has a negative significant influence on the existing

relationship between service quality and patient satisfaction when the price was low patient satisfaction was high and when the price was high patient satisfaction was low (Price and patient satisfaction relationship were inversely proportional). Communication as moderator has a positive significant influence on the existing association between service quality and patient satisfaction when communication was effective patient satisfaction was high and when communication was ineffective satisfaction of the patient was the low or directly proportional relationship.

Access as moderator also has a positive significant influence on the existing association between service quality and patient satisfaction, when access was easy patient satisfaction was high and when access was hard patient satisfaction was the low or directly proportional relationship.

5.3 Recommendations

The main recommendations which extend the current studies are as follows;

- These investigations should be expanded to the public hospitals and other sectors of the service where certain updated recommendations will be incorporated keeping in view different market practices and trends.
- This study should be extended to segregate customers/patients keeping in view their social demographics features or personal norms, attitudes and thoughts. People of different aged groups belonging to various social-economic factors and different life standards will also be considered in the services of different hospitals and a future investigation can target these market patches.
- This study should be extended to the Province level or country level to make this study more comprehensive and authentic.
- This study should be extended by imitating this type of investigation or any other likely investigation after the overall analysis of the actual minus desired the satisfaction of the patients might be an interesting one.

5.3.1 Practical Implications

This chapter also describes/elaborates the study implications in terms of managerial implication, organizational implication and academic implication. Extracts of the research would be feasible for the hospital management to circulate or coherent operational policies to assure or confirm the best quality to the patients by healthcare service providers. This investigation will encourage healthcare services management and institutions to divert attention or focus on the service quality of the private healthcare systems and improve outdated medical services. Furthermore, this investigation will provide a very clear view of the behavior of the patients, attitudes or approaches, the objective of satisfaction and loyalty purposes towards the standards and quality of the healthcare services. Academics and the professionals will consider these results very feasible and accommodative while taking decisions about the healthcare services provisions and their best feasibility for their users / patient satisfaction or other requirements.

- It is vital and important to develop an interaction between service quality and patient satisfaction as supported by the literature.
- It would be feasible for the business to focus on quality to attain customer loyalty.
- It would also be helpful to develop a price and quality relationship.
- This study finding will provide awareness about the existing relationship between service quality and satisfaction level at different price slabs (High and Low price)
- This study finding will provide awareness/knowledge about the existing correlation between service quality and level of satisfaction at different communication levels (Effective and Ineffective communication).
- This study finding will provide awareness/understanding of the existing correlation between service quality and level of satisfaction at different access levels to the healthcare facility (Easy and Hard access to the facility).

5.3.2 Managerial Implications

Managerial implications refer to the practical use of the data/information, study findings and the observations made while taking practical decisions for the betterment/profitability of the organization. whether to travel ahead with the same project, what will be the

investment in the current project, which channel/distribution system to be adopted, or budget allocation among the different heads of the firm such as promotion, development, advertisement and research?

This study has many managerial implications for the healthcare organization especially in an environment like in Pakistan and for the organizations of other developing countries where people have not too much awareness about the quality of the services. This study offers a comprehensive and concise statement about the service quality, its different aspects, its relationship with satisfaction and loyalty. This research or investigation also elaborates the degree of change in the existing association between service quality and satisfaction, at different price levels (high & low), at different communication levels (effective & ineffective communications) and access to the facility (easy & hard access).

This research may also be helpful for the organizations or managers to make better decisions for the proper utilization of their available resources. That will enable them to maximize their profitability by enhancing the service quality keeping in view the patient's satisfaction and patient's loyalty with the moderating impact of the price of desired services, communications/proper guidance to the patients and access to the medical facility.

- The study of service quality, patient satisfaction and patient's loyalty will be feasible in the system of quality management, hence guiding service provider to maintain, monitor and upgrade the service quality.
- This research will inspire the service providers for a better understanding of various dimensions that influence the overall quality of the service, and to draw out or plan service delivery channels or processes.
- By the SWOT analysis of the service quality, service providers can allocate/use adequate required resources to services sector that will ultimately upgrade/enhance their service quality keeping in view the cost/price impact.
- This study finding will provide insights for Pakistan and other countries' healthcare facilities, which will help to improve service quality which will be resulted in patient's satisfaction and patient loyalty keeping in view, cost/price of

service, patient-doctor communication and access to service providing hospital/medical facility.

5.3.3 Academic Implications

The present research study can be utilized by the social scientists for residing upon those social factors which moderate negatively the relationship of service quality, patient's satisfaction and patient's loyalty. The investigations can also be utilized for the future study in enhancement objective for sponsors of the tasks to consider the feasible sketch of service quality with the patient's satisfaction with the mediating and moderating impact of other factors to find out the relationship or impact of some other factors.

In this globalized era of the economy, the study can be utilized by researchers to evaluate other healthcare practices or factors to maximize client satisfaction for their retention or loyalty. This study will suit best in the developing countries where the peoples are very conscious about the cost or price of the desired healthcare or other services. There may be some variation in the implementation of services or infrastructure for the execution of the desired services. In this regard, the reference of this investigation will be coded for the comparison purpose among the standards of the healthcare organizations.

This implication will be beneficial or feasible for what class of users can take advantage of studying and incorporating this investigation in their practical life and future research/studies.

- It will determine the mediating role of patient satisfaction in future research.
- It will also motivate the researcher to investigate the moderating role of price.
- It would be accommodative in investigating the moderating role of communication,
- It will also be feasible in investigating the moderating role of access in future research.

5.4 Limitations of the Study

The current research has some limitations which are discussed below, which might be due to investigations of the specific selected area; it will motivate insight into further

academic endeavors. Influence of service quality on patient satisfaction and patient's loyalty, testing a moderated mediation model with price, communication and access as moderators and patient's satisfaction as mediator a study in the selected private sector hospital of Faisalabad, a study conducted in Pakistan. There are many other factors which can be considered in the study but we have restricted our study in that specific frame due to some unavoidable reasons. Therefore future researchers can research a more vast level.

- Firstly only Faisalabad private sector selected hospitals have targeted for data collection and analysis, so this investigation should be extended to public hospitals and the other sectors of the services where certain changes will be inducted keeping in view different market practices and trends.
- Secondly in this regard this investigation will not segregate customers from patients concerning the social demographics features or norms and thoughts. People with various age factors with different social, economic status and lifestyles will also be assessing the hospital services differently and the future, an investigation might target these market segments.
- Thirdly there was budget constraints/deficiency of financial funds; due to this factor, it was not possible to expand this study or to collect data from different districts for study, to make this study more comprehensive and productive.
- Fourthly, our concept was based on the perceptual grounds only another approach to the influence of service quality on the patient with the moderating role of price/cost of service, patient-doctor communication and access/location of the service providing hospital/medical facility. In this regard, imitating it or the same type of study and which can thoroughly examine perception minus expectation regarding satisfaction may be an interesting one.
- Fifth, being end-user or consumer-based research or study, observations of consultants, nurses, medical staff, technicians, laboratory staff' and medical assistants providing the services were not considered in this study.
- Lastly, research findings are centered on overall patient satisfaction, but none analysis has been performed between the various levels of satisfaction of the patients of both private and public healthcare sectors, which were taking or under

treatments from these sectors. In the future investigation, staff's expectations or views, along with the patients or customers, are necessary to evaluate patient satisfaction concerning the dual opinion in the healthcare sector of both the public and private.

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APPENDIX