

**The Impact of the Medical Supplies Companies
Services Quality on Customers' Satisfaction:
Field Study on Major Private Hospitals in Riyadh**

أثر جودة خدمات شركات المستلزمات الطبية على رضا العملاء:
دراسة ميدانية على المستشفيات الخاصة الكبرى بالرياض

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**Thesis Submitted as Partial Fulfillment of the Requirements for
Master's Degree in Management**

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Jan. 2023

Authorization

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Acknowledgment

In the name of Allah, the most Beneficent, the most Merciful, the most Compassionate, I thank God from all walks of life. I could not have finished this work without his help. Also, I would like to take the chance to express my heartfelt thanks to my supervisor, Dr. Abdel-Aziz Ahmad Sharabati, whose recommendations, devotion, advocacy, patience, encouragement, and support have led me to achieve this work. In fact, it would not be possible to complete this work without the kind support and help of many individuals and organizations. Therefore, I would like to extend my sincere thanks to all of them.

Finally, thanks to the examination committee for devoting much of their valuable time to reviewing and discussing the material of the study.

Manar Yahia Younis

Dedication

This thesis is dedicated to my precious family; my father and mother, the greatest persons in my life, to my lovely husband fears, I am really honoured to have you in my life, thank you for your help, patience, and support during this journey, and my wonderful daughter, Eileen, Thanks to my dear sister Rahaf for her endless support. Brothers and sisters, thank you for your encouragement and support.

Really, I cannot express my gratitude and thanks in words to my lovely family I extend my deepest appreciation to them.

Manar Yahia Younis

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The Impact of the Medical Supplies Companies Service Quality on Customers' Satisfaction: Field Study on Major Private Hospitals in Riyadh

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Abstract

The purpose of this study is to study the impact of service quality of medical supplies companies on customer satisfaction in private hospitals in Riyadh, Saudi Arabia.

To actualize this study the quantitative descriptive and cause-effect method has been used to test the hypotheses. Data were collected by questionnaire from 111 employees from the Procurement and Supply Chain Department who work in private hospitals in Riyadh, utilizing an online questionnaire, after confirming normality, validity, reliability, and relationships between variables using SPSS software. Ultimately, tested the impact by applying multiple regression analysis.

The results show that the medical supplies companies in Riyadh apply the elements of service quality. The relationship between the elements of service quality and customer satisfaction also appears to be strong, and the results also show a statistically significant positive effect of service quality on customer satisfaction in the medical supplies companies in Riyadh, where the highest impact of the response was on Customer satisfaction, empathy, reliability, and then assurance, respectively. While tangibility does not show a significant impact on customer satisfaction. The study recommends the application of service quality in companies because it affects customer satisfaction.

Keywords: Service Quality, SERVQUAL, Customer Satisfaction, Medical Supplies Companies, Private Hospitals

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المستشفيات الخاصة الكبرى بالرياض
إعداد: منار يحيى يونس
إشراف: الدكتور عبد العزيز أحمد الشرباتي
الملخص**

هدفت الدراسة إلى دراسة أثر جودة الخدمة لشركات المستلزمات الطبية على رضا العملاء في المستشفيات الخاصة في الرياض/ المملكة العربية السعودية.

من أجل تطبيق هذه الدراسة تم استخدام الأسلوب الكمي الوصفي والسببي لفحص الفرضيات. وقد جمعت البيانات من 111 موظفاً من قسم المشتريات وسلاسل التوريد ممن يعملون في المستشفيات الخاصة في الرياض بواسطة الاستبانة الإلكترونية وذلك بعد التأكد من الدقة والموثوقية والعلاقات بين المتغيرات باستخدام برنامج (SPSS). وتم اختبار الأثر بواسطة الانحدار المتعدد.

أظهرت النتائج أن شركات المستلزمات الطبية في الرياض تطبق عناصر جودة الخدمة. وتظهر أيضاً العلاقة بين عناصر جودة الخدمة ورضا العميل قوية، وكذلك أظهرت النتائج أثراً إيجابياً ذو دلالة إحصائية لجودة الخدمة على رضا العميل في شركات المستلزمات الطبية في الرياض؛ حيث كان الأثر الأكبر للاستجابة على رضا العميل، ثم التعاطف، الموثوقية، الأمان على التوالي، بينما لم يكن هناك أثر ذو دلالة إحصائية للملموسية على رضا العميل. أوصت الدراسة بتطبيق جودة الخدمة في الشركات، لأنه يؤثر على رضا العميل.

الكلمات المفتاحية: جودة الخدمة، أبعاد جودة الخدمة، رضا العميل، التوريدات الطبية، المستشفيات الخاصة.

Chapter One: Introduction

1.1 Background:

The goal of any company is profit, and profit always increases and decreases to customer demands, to achieve customer satisfaction, must to a measure of how an organization delivers its services compared to the expectations of its customers, service quality has become a reality imposed by the nature of conditions and changes in the contemporary environment, to meet the needs and desires of customers and the competitive advantages that enable them to bring new customers and maintain their current customers to achieve a competitive advantage in order to stay and compete in the current market. Evaluating customer satisfaction with products or services is important to organizations. Customer satisfaction is an entry point to ensure and maintain customers' demands and develop their loyalty to the organization, as this is only done by providing products or services that meet their needs, and desires and are consistent with their expectations.

Conceptualized as the comparison of service expectations with actual performance perceptions (Ali, 2015). The service they provide to their customers in order to be able to get more satisfaction which can lead to increased loyalty from customers (Joudeh and Dandis, 2018). The services that are provided to their customers in order to ensure their satisfaction and thus their loyalty.

Today's competitive market situation makes industries prioritize customer satisfaction, which is widely known to lead to customer retention. Consequently, businesses can increase their profit and sustain their competitive advantage within their industry (Balinado, et. al., 2021). For the sake of development and growth, service quality and customer satisfaction have become a concern for service institutions, and customer

satisfaction has become the focus of their attention. This compound word consists of two words, which are Service and Quality, and their five dimensions are Tangibility, Reliability, Responsiveness, Assurance, and Empathy (Parasuraman, et. al., 1985). Service quality can be perceived as an assessment of how a competently provided service measures customer expectations (Ngo and Nguyen, 2016). Satisfied customers have more chances to repeat their purchases and connect positively with the company, measuring service quality in order to achieve customer satisfaction (Zamry and Nayan, 2020).

Therefore, this study is dedicated to the impact of the medical supply company service quality on customer satisfaction in a private hospital in Riyadh.

1.2 Study Purpose and objectives

The main purpose of the current study is to identify the impact of the medical supplies company services quality on customer satisfaction in private hospitals in Riyadh. The investigation focused on analyzing the five dimensions of service quality, which are the independent variable (Tangibility, Reliability, Responsiveness, Assurance, Empathy) and their impact on the dependent variable, customer satisfaction, accomplish the following objective:

- 1-To measure the level of service quality in medical supplies companies.
- 2-To measure the level of customer satisfaction in private hospitals in Riyadh.
- 3-To find the relationship between service quality for medical supplies companies and customers' satisfaction in private hospitals in Riyadh.
- 4-To find the impact of service quality on customers' satisfaction in private hospitals in Riyadh.

Moreover, to make recommendations to managers in medical supply companies and other related industries, as well as recommendations for decision-makers who are

concerned about service quality and Customer satisfaction. Furthermore, to provide an additional paper for literature and academic calligraphy.

1.3 Study Significance and Importance:

The current study might be considered one of the leading studies that examine the impact of the medical supplies company services quality on customer satisfaction in private hospitals in Riyadh, to investigate the actual implementation level of service quality dimensions (Tangibility, Reliability, Responsiveness, Assurance, Empathy) as well as customer satisfaction with the services provided to them, and to show the defect found in any of them.

Therefore, the value of this study arises from the following scientific and practical considerations:

1. Providing a theoretical framework on the impact of service quality dimensions on customer satisfaction will support academics and research on service quality in medical supplies companies.
2. Determining the effect of service quality dimensions on customer satisfaction for private hospitals in Riyadh.
3. Determining the impact of achieving customer satisfaction on medical supplies companies.
4. Providing a base of information that helps institutions measure the quality of services.

The importance of this study is to emphasize the role of the medical supplies companies' services quality in creating Customer satisfaction for private hospitals in Riyadh; moreover, it helps other industries to achieve customer satisfaction. Finally, the current study may add value for libraries to be used as a secondary source of data.

1.4 Problem Statement:

The purpose of this study is to the extent of customer satisfaction with the quality of services, in which employees in several hospitals were interviewed from the supply chain and procurement. Several inquiries were raised about their satisfaction with the quality of services. It became clear that there are problems related to the quality of services provided to them by medical supply companies. It was found that there is a complaint in logistical transactions with little regard to the customer. After examining these points and reviewing previous literature, Bharwana, et. al, (2013) emphasized that organizations are in need to measure and visualize the quality of their services to identify the in-satisfaction parts, and instantly launch necessary improvement actions. For businesses to seek and retain new customers and increase their loyalty stems is five times the cost of retaining a current one (Selvakumar,2015). So, organizations aim to achieve this goal by developing and improving the quality levels for their customers (Fida, et. al., 2020). Balinado, et. al, (2021) recommended applying the impact of service quality on customer satisfaction to other industries and after reviewing the study, it turned out that this is the first study that shows the impact of the medical supplies companies' service quality on customer satisfaction in private hospitals in Riyadh. The problem of this research can be perceived by scientifically answering the following questions.

1.5 Study Questions:

The problem of this research can be perceived by scientifically answering the following questions:

- 1- What is the level of service quality in medical supplies institutions in Riyadh?
- 2- What is the level of customer satisfaction in private hospitals in Riyadh?

3- Is there a relationship between service quality and customer satisfaction in private hospitals in Riyadh?

4- Does service quality affect customers' satisfaction in private hospitals in Riyadh?

The first and second questions will be answered by descriptive analysis, the third question will be answered by correlation, and the fourth question will be answered by testing the following hypothesis.

1.6 Study Hypothesis:

Based on the problem statement and according to the study model, the following hypotheses can be developed:

H01: service quality does not impact customers' satisfaction in private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Based on the service quality components, the following sub-hypotheses were developed:

H01.1: Tangibility does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

H01.2: Reliability does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

H01.3: Responsiveness does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

H01.4: Assurance does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

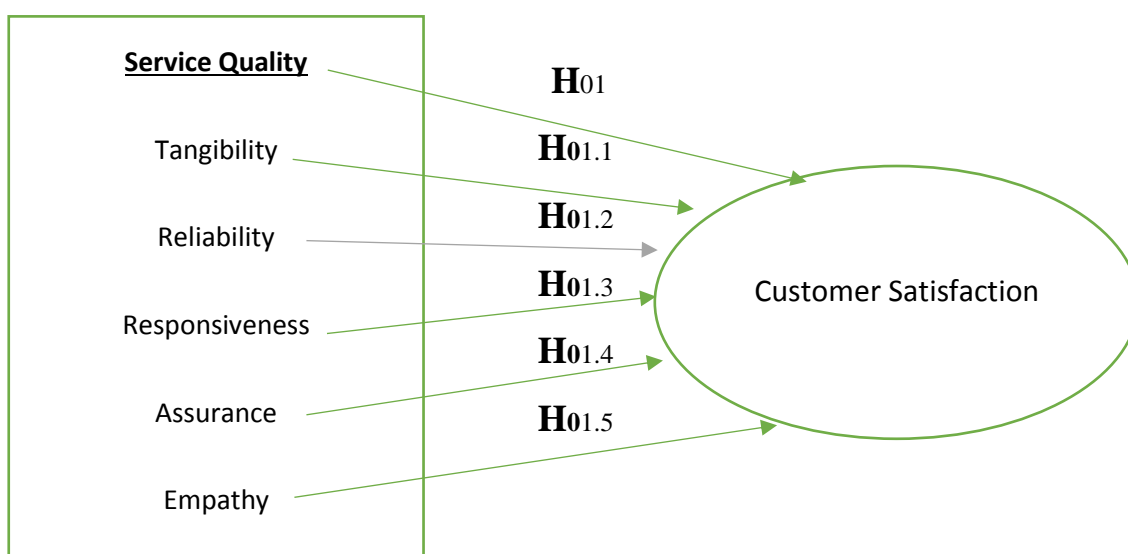
H01.5: Empathy does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

1.7 Study Model:

This study investigated the impact of service quality as an independent variable on customer satisfaction of the private hospitals in Riyadh as the dependent variable, moreover, the impact of service quality is to be investigated for each one of the five dimensions.

Independent Variables

Dependent Variable



Model 1: Study Model

Sources: Model developed based on previous studies, (Selvakumar,2015; AL-Mhasnah, et. al. 2018; Alolayyan, et. al. 2018; Alabboodi 2019; Vencataya, et.al. 2019; Cheng & Govindarajo, 2020; Morad, et. al. 2021),

1.8 Operational Definitions:

Tangible: The physical appearance of personnel, equipment, facilities, suppliers, and vendors to be able to add value to the customer, which maximizes the value added to the customer satisfaction

Reliability: is employee cooperation in providing services and customer requirements accurately and promptly, so that the service is free from errors and problems.

Responsiveness: is based on two pillars, the first one is the organization's flexibility to adopt any changes in demand quantities or requirements, and the second pillar is the organization's speed to fulfil the demand.

Assurance: It is the customer's feeling of confidence and reassurance that the service provided to him is void of error, danger, or doubt, including psychological and material reassurance

Empathy: defined as individualized attention the firm provides its customers' organization, delivers its services in a way that makes the company seem empathetic to its customer's desires and demands

Customers Satisfaction: is defined as a measurement that determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how to improve or changes its products and services.

1.9 Study Limitations and Delimitations:

Human Limitation: This study was carried out on the department procurement and supply chain in private hospitals in Riyadh.

Place Limitation: This study will be conducted in major private hospitals in Riyadh, Kingdom of Saudi Arabia.

Time Limitation: This study was carried out within the period between the first and second semesters of the academic year 2022/2023.

Study Delimitation: Results of this study were determined by the degree of sincerity and stability of the study tool and the degree of objective response of the respondents of the study sample and their scientific honesty. The study was carried out in Riyadh, therefore, generalizing results of one and/or Riyadh setting to other companies and/or countries may be questionable. Extending the analyses on services and countries represent future research opportunities, which can be done by further tested with larger samples within the same companies and including other companies will help mitigate the issue of generalizing conclusions on other organizations and industries. However, further empirical research involving data collection from diverse countries especially Arab countries is needed.

Chapter Two: Conceptual and Theoretical Framework and Previous Studies

2.1 Introduction

This chapter includes definitions and dimensions of service quality, including Tangibility, Reliability, Responsiveness, Assurance, and Empathy, in addition to the relationships between service quality variables and customer satisfaction, with the inclusion of previous models and previous studies. Furthermore, it summarizes what differentiates this study from its prior.

2.2 Definitions and Components of Variables:

2.2.1 Service Quality:

As competition becomes more intense and environmental factors become more hostile, the concern for service quality grows. If service quality is to become the cornerstone of marketing strategy, the marketer must have the means to measure it. The most popular measure of service quality is SERVQUAL, an instrument developed by Parasuraman, et. al., (1985). Acquisition of new customers and retention of existing customers and quality is the key to success in motivating customers to buy (Shaheen 2004). Even though the concept of service quality is an old concept, it seems that there is a consensus among practitioners, researchers, and scholars about its definition. Parasuraman, et. al. (1988) Perception and expectations towards the service provided. It is “the gap between customers’ expectations and their perception of service performance.” The smaller the gap, the better the quality of service and the higher the customer satisfaction. Considering the intense competition witnessed by the business environment, institutions seek to provide their services at a high level of quality, to be able to meet the needs, desires, and expectations of their customers, in a manner that achieves their satisfaction and happiness. It is a multidimensional questionnaire form,

used to measure beneficiaries' satisfaction with the service provided to them and to find out the difference between customers' expectations of the service and the service actually provided to them. It is an abbreviation of the words Service and Quality. The model was designed by Parasuraman, et al. (1985) to be used to measure quality in the services sector. This model is based on five dimensions or criteria through which the customer usually evaluates the service: tangibility, reliability, responsiveness, assurance, and empathy. Should be above the name this would win the loyalty of its customers, which would strengthen its competitive position and keeps current customers to bring more profits for the firm. Al-Azzam, et.al. (2015) defined service quality as a focus on an evaluation that reflects the customer's awareness of specific dimensions of service. Selvakumar (2015) defined service is any intangible act or performance that one party provides to another party that does not lead to ownership of something. Ngo and Nguyen (2016) defined it as everything related to consumer affairs and commitment to product quality provided to them and continuous research and selection of the best ways to satisfy their needs and desires. Ashraf, et.al. (2018), Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no consensus emerging on either Vencataya, et.al. (2019). What is meant by service quality can be defined in a variety of ways? One often-used definition of service quality is the extent to which a service meets the demands or expectations of clients (Ramaya, et. al., 2019). As a result, service quality can be defined as the gap between client expectations and perceived service. The concept of quality has developed historically, starting with the emphasis that quality means examination and Control over the specifications that were the basics of quality until the end of the twentieth century. Quality means the quality of the product and service as perceived or desired by the customer along with the quality of processes and procedures Ali, et al. (2021). There

is no doubt that achieving quality is one of the priorities of various organizations because it brings them benefits.

Through the previous definitions, we can conclude that the customer in the end determines the quality of the service and that decision is not viewed by the institution, but from the point of view of the customer, and therefore Service institutions should take into account the expectations of customers before providing services to them, given that the quality of service is based on the expectations of customers for the service that they will receive and compare it with You actually obtained it, conclude that the customer, after making the comparison, expresses their opinion either by being satisfied or not with the quality of this service, and this indicates the importance of service quality in achieving customer satisfaction. The SERVQUAL approach is the most common method for measuring service quality.

2.2.2 SERVQUAL Components:

Parasuraman, et.al. (1985) saw that in evaluating the quality of service, the criteria on which it is based, are determined by the beneficiary of the service. Customers' evaluation of service quality is determined through ten dimensions, the degree of its importance varies according to customers, which are: reliability, tangibility, credibility trust, understanding and knowledge of customer needs, communication, assurance, empowerment, accessibility, responsiveness, and empathy. Parasuraman and Berry (1988) identified five basic dimensions out of the ten mentioned as a measure of service quality, it was called the SERVQUAL scale, as it proved high efficiency in the practical field. The treatment of quality as a kind of attitude is well accepted by market researchers (Smith, 1995). It provides a framework of five dimensions that can be adapted to meet the demands of the kind of service setting under assessment.

Service quality is conceptualized as the comparison of service expectations with actual performance perceptions (Kusumadewi and Karyono, 2019). It also could be defined by Ali, et al. (2021) as the tendency to focus on the requirement of customer and their trust and expectation about the products. And due to that, any market or business area needs to focus on the factors affecting customers. Shaheen (2004); Parasuraman, et. al., (1985); suggested a new model for service quality measurement by measuring the gap between perceived service and expected service they proposed the gap analysis for service quality by measuring the difference between expectation and service performance. In this model they found five gaps to be measured:

Gap 1: The difference between consumers' expectations and management's perceptions of the customer's expectations

Gap 2: The difference between management perceptions of consumers' expectations and service specifications

Gap 3: The difference between service quality specifications and the service provided.

Gap 4: The difference between the service provided and external communications to customers

Gap 5: The difference between customers' expectations and consumers' perceptions of the service.

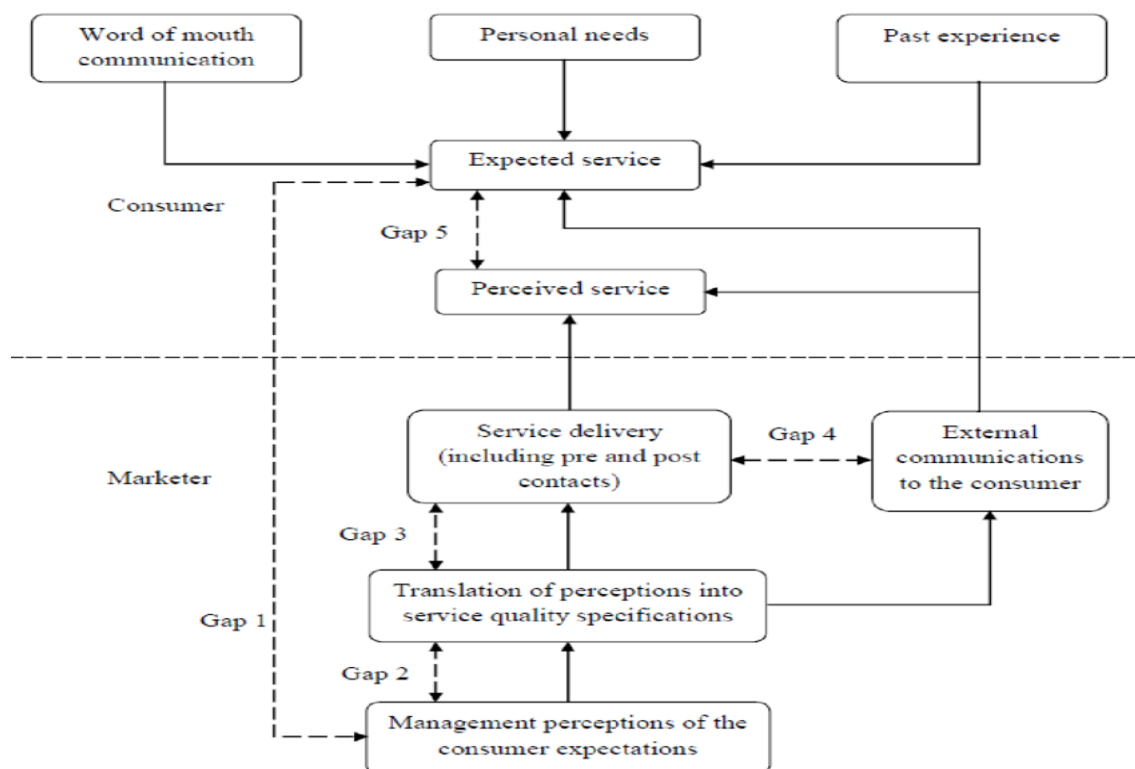


Figure 1: GAP Model

Source : Parsuraman et. al.(1985)

In Servqual, both store service performance and consumer expectations of the store service, are explicitly measured to assess the 'gap'. Several researchers found the performance perceptions to be sufficient in assessing service quality as compared to the gap (Carman, 1990).

In summary, to close the gap between service quality and customer satisfaction, it must be used. The SERVQUAL approach has five dimensions (tangibility, reliability, responsiveness, assurance, and empathy) which is the most common method for measuring service quality.

Tangibility:

The appearance of physical facilities, equipment, personnel, and written material corporeal impression of human resources, conveniences, and equipment. Bharwana, et.al.

(2013) included the physical facilities and equipment, and the outward appearance of the staff Naik, et al. (2010). It is internal and external. Visual appearance Ashraf, et.al. (2018), Tangibility is a particularly important point because there is a relationship between the customer and tangibility issue in which tangible service gathers customer attention on service quality by matching the tangibility associated with these services provided. El-Borsaly and Hassan (2020) all physical objects are located in the place where the service is provided. This represents the tangible aspects related to the service (Ali, et. al.2021).

In summary, Tangibles are the physical appearance of personnel, equipment, facilities, suppliers, and vendors to be able to add value to the customer, which maximizes the value added to customer satisfaction.

Reliability:

After revising the studies and research, it has been noticed that there is an agreement among researchers about the definition of reliability. Ojo (2010) stated that reliability is the reducing of uncertainty to guarantee on-time delivery and to achieve the metrics of the right time, and quantity. Tan, et al. (2014) stated that it is the organization's ability to deliver the service it promised to provide to consumers in an accurate, correct, and consistent manner. Babaz and Abdelkarim, et. al. (2018) stated that the reliability of the capability to achieve tasks based on expectations required high predictability of process outputs to achieve the metrics at the right time. Quantity and quality are defined as Competitive Advantages by Sharief (2018), which means the ability to exactly provide the required service according to certain specifications. Mesry and Nadhir (2022) defined it as the ability of the service provider to perform the service required of him in an accurate and reliable manner. The customer expects the service to be provided to him

with a high degree of accuracy and proficiency, as well as on the specified dates, in other words, commitment to time and performance exactly as promised.

In summary, reliability is employee cooperation in providing services and customer requirements accurately and in a timely manner, so that the service is free from errors and problems.

Responsiveness:

There is a definition for responsiveness, some researchers and scholars refer to speed and flexibility concepts as an alternative to responsiveness. Other researchers defined it as the desire of employees to serve customers quickly, honestly, and accurately Malik, et. al. (2011). The service organization should have sufficient flexibility to respond to the various requirements of customers, and the response includes accuracy in implementation dates; speed in fulfilling the service; providing services that would urge the client to deal with the institution, and the willingness to help customers and to provide prompt service Omar, et.al.(2016). This dimension focuses on the attitude and promptness in dealing with customer requests, questions complaints, and problems Ramya, et.al. (2019). It also means the organization's ability and willingness to take the initiative to help customers and respond frankly to their inquiries, through the ability to deal effectively with all customers' requirements, respond to their complaints, and work to solve them quickly and efficiently, in a way that convinces customers that they are appreciated and respected by the organization, Dam Sao & Dam Tri (2020). In addition, it expresses the initiative in providing service by the employees with an open mind, and this enhances the customer's confidence in the institution.

In summary, Responsiveness is based on two pillars, the first one is the organization's flexibility to adopt any changes in demand quantities or requirements, and the second pillar is the organization's speed to fulfil the demand.

Assurance:

Assurance Feelings of confidence and security in dealing with the institution, and this reflects the experience, knowledge, and ability of employees to instill confidence in themselves in parallel with instilling confidence in customers, (Bharwana, et. al., 2013). Assurance has been defined as employees' courtesy and knowledge and their capacity to transfer trust to customers Pakurar, et. al., (2019). It is the guarantee to the customers that the service provided to them is free from error, danger, or doubt, including psychological and material reassurance Magasi, et. al., (2022). Knowledge and courtesy have been defined as assurance (Bintoro, et.al.2023).

In summary, it is the customer's feeling of confidence and reassurance that the service provided to him is void of error, danger, or doubt, including psychological and material reassurance.

Empathy:

There is an agreement among researchers about the definition of Empathy. To understand customers' personal needs, to treat them with kindness, to take care of them individually or personally, and to view them as close friends. Siddiqi (2011) said that empathy is: "the degree to which the customers are offered caring and personalized attention". Empathy can be characterized as specific attention to individuals with utmost care and attention, ranging from employees to customers, with more attention towards things individually and concern about them Meesala and Paul (2018). Another definition of empathy is the caring and individualized attention provided to customers by their banks

or service firms Ramya, et. al. (2019). Empathy means focusing the service on an individual basis, i.e., showing personal care and attention to customers and leaving an impression on each of the service recipients that they are the most important Ali, et.al. (2021) "Ease of building relationships, good communication, caring and understanding customer needs"(Bintoro, et.al.2023).

In summary, empathy is defined as how an organization delivers its services in a way that makes the company seem empathetic to its customer's desires and demands.

2.2.3 Customer Satisfaction:

It has been noticed recently that the term customer satisfaction has appeared in a wide and noticeable manner, especially considering the crowding out and the increase in the number of business organizations working in the same sector, especially with the expansion of international and global markets, Khan & Fasih (2014). The increase in the volume and rate of commodity and service outputs requires each organization to maintain the list of their clients being the most important part and the supreme goal that these organizations try to maintain, on the grounds that they are the main reason that guarantees these organizations continuity, success and the ability to achieve competitive advantages. Ngo and Nguyen (2016) define it as that feeling that gives the customer delight or displeasure that results when comparing the quality of the product or service with the customer's expectations. Providing consumers with the desirable quality of services, Ashraf, et.al. (2018). If a customer is displeased with the quality of said service, the possibility of purchasing the same service another time is close to none according to Fida, et.al. (2020). Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance or outcome in relation to his or her expectation. In other words, customers will be satisfied if service quality meets their

expectations. Meesala and Paul (2020) Consumer satisfaction is the key factor that drives when the performance of the product or service exceeds expectations. To measure customer satisfaction, it is possible to ask several questions to the customer, and by answering satisfaction is measured (Zamry and Nayan, 2020).

In summary, Customer satisfaction is defined as a measurement that determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how to best improve or change its products and services.

2.3 The relationship between service quality and customer satisfaction:

Many researchers have studied the impact of service quality on customer satisfaction. Joudeh and Dandis (2018) studied Service Quality, Customer Satisfaction, and Loyalty in Internet Service Providers. Ishmael and Rebecca (2018) presented the effects of service quality and customer satisfaction on repurchase intention in restaurants on the University of Cape Coast campus. Al-Mhasnah, et al. (2018) studied the relationship between service quality and customer satisfaction in the Jordanian healthcare sectors. Othman, et al. (2019) the impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia. Fida, et al. (2020) studied the impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the Sultanate of Oman. Ali, et, al., (2021) Hotel Service Quality: The Impact of Service Quality on Customer Satisfaction in Hospitality. Balinado, et al. (2021) studied The Effect of Service Quality on Customer Satisfaction in an Automotive After-Sales Service.

In summary, there is a body of literature investigating service quality on client satisfaction in several areas. Moreover, most of the previous relationships were conducted for the impact of service quality on customer satisfaction or the relationship between

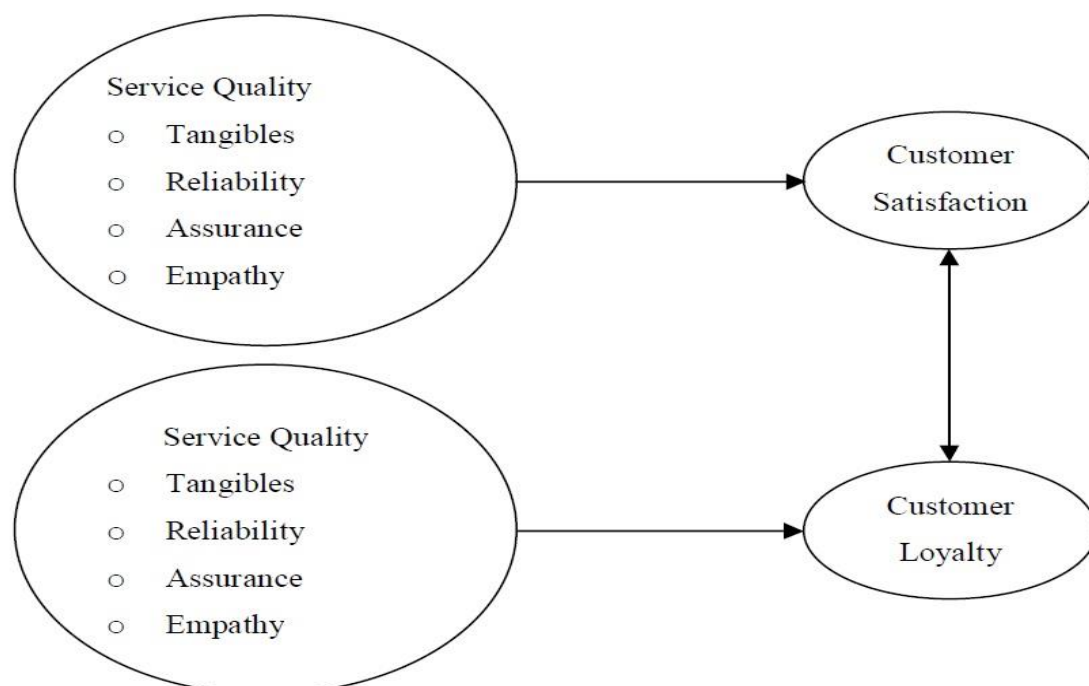
service quality and customer satisfaction. This study depicts the dimensions of service quality on customer satisfaction to examine the effect of service quality on customer satisfaction. The service quality conceptualization was extracted based on the summarization of previous relationships.

2.4 Previous Models:

After reviewing the relevant literature, it was found that there are several definitions of sub-variables. Moreover, the literature on the impact of service quality on customer satisfaction and its sub-variables was discussed and studied. The next section will briefly discuss some etiquette and models that studied the sub-variables of service quality with customer satisfaction.

Khan & fasih (2014) model:

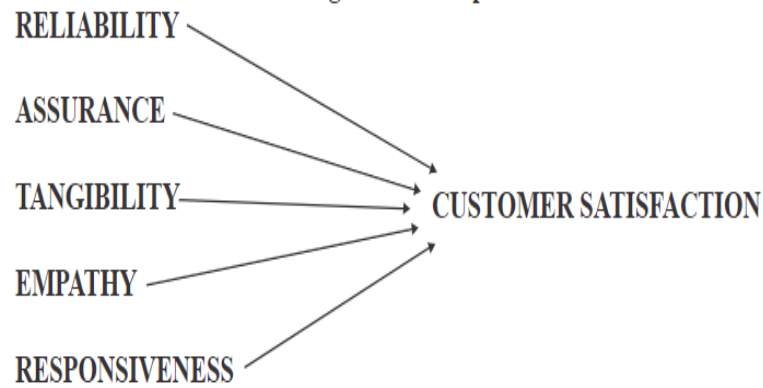
The model Impact Service Quality Tangibles Reliability, Assurance, Empathy impact on customer satisfaction and Service Quality impact on customer loyalty.



Model (2-1): Khan & fasih (2014)

Selvakumar (2015) model:

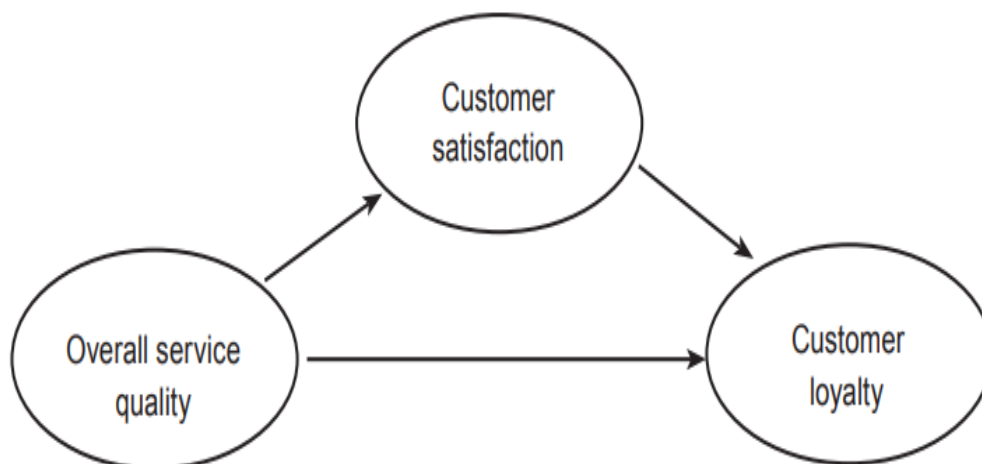
It demonstrates the effects of five key predictors of service quality (reliability, assurance, tangibility, empathy, and responsiveness) on customer satisfaction.



Model (2-2): Selvakumar (2015)

Ngo & Nguyen (2017) model:

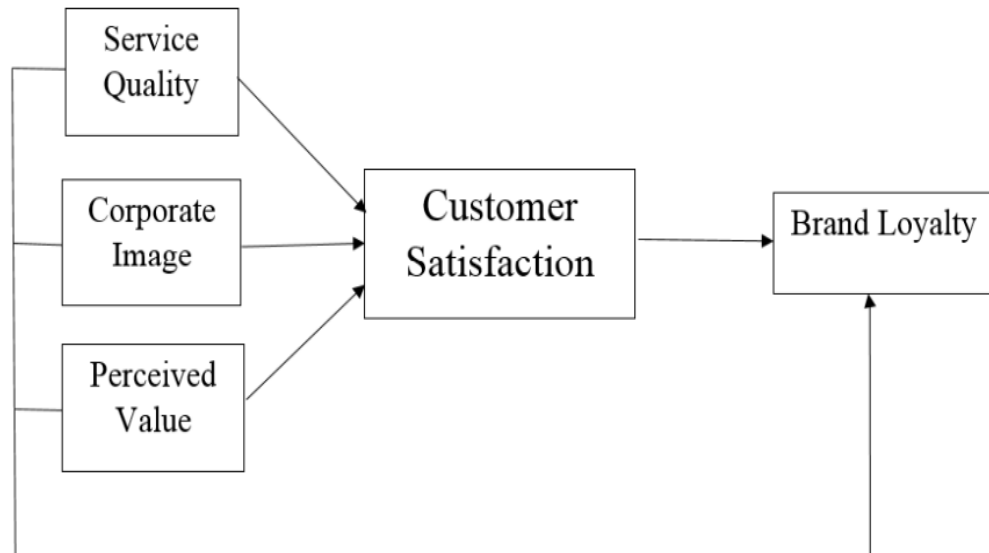
The proposed mediating relationship between overall service quality, customer satisfaction, and customer loyalty.



Model (2-3): Ngo & Nguyen (2017)

Ashraf, et. al. (2018) model:

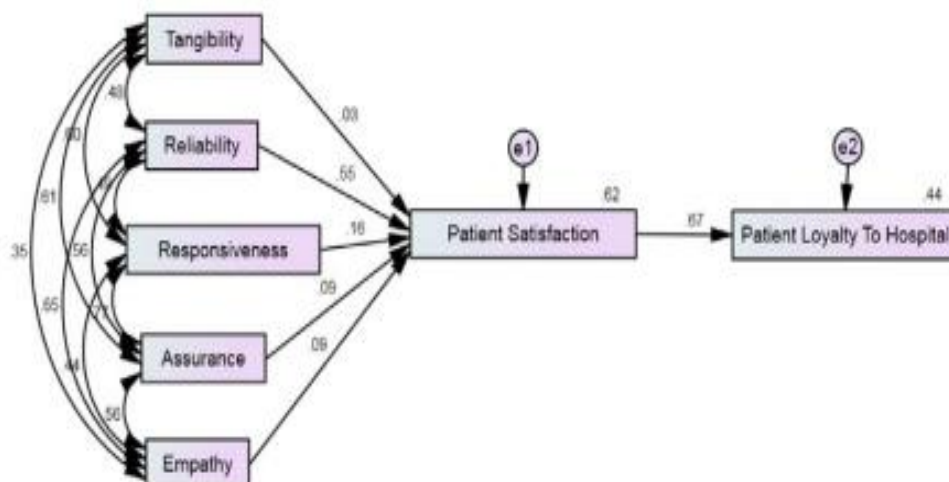
The model presents the Impact of Service Quality, Corporate Image, and Perceive Value on Brand Loyalty with the Presence and Absence of Customer Satisfaction.



Model (2-4): Ashraf, et.al. (2018)

Meesala & Baul (2018) model:

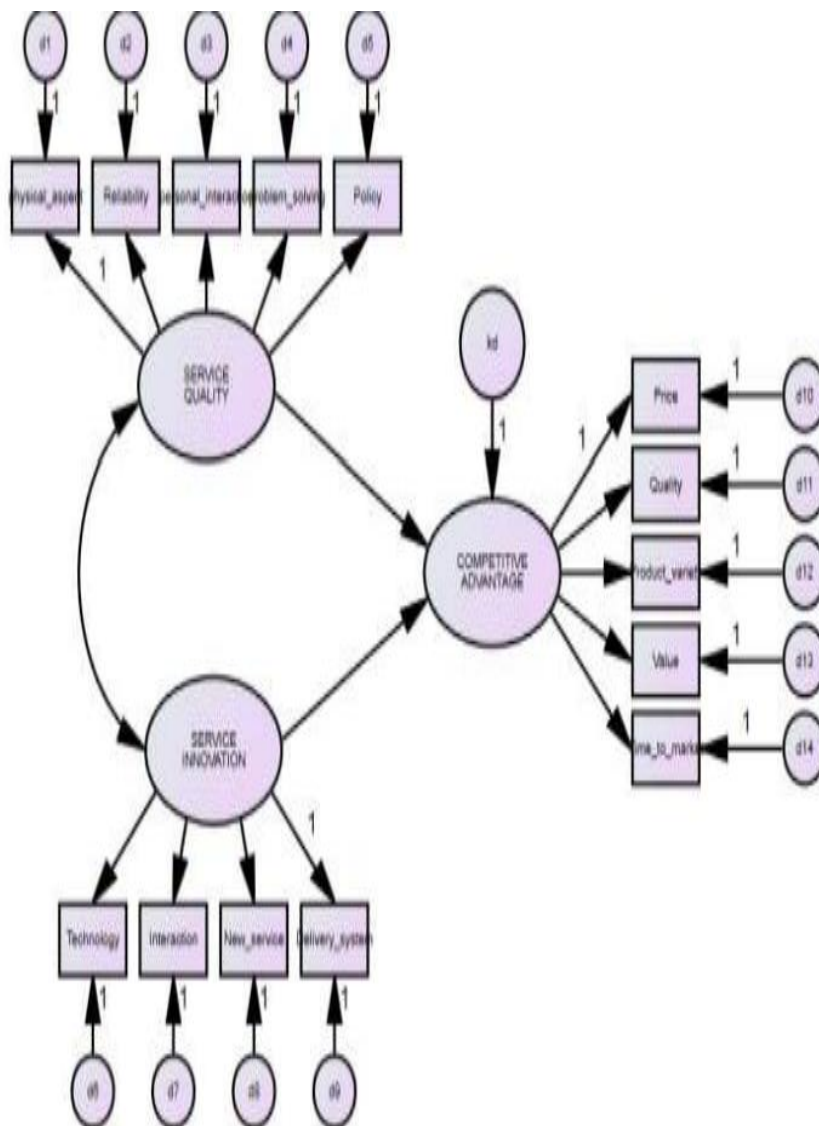
Service quality Tangibility, reliability, responsiveness, assurance, and empathy using an intermediate of patient satisfaction on patient loyalty.



Model (2-5): Meesala & Baul (2018)

Kusumadewi & Karyono (2019) model:

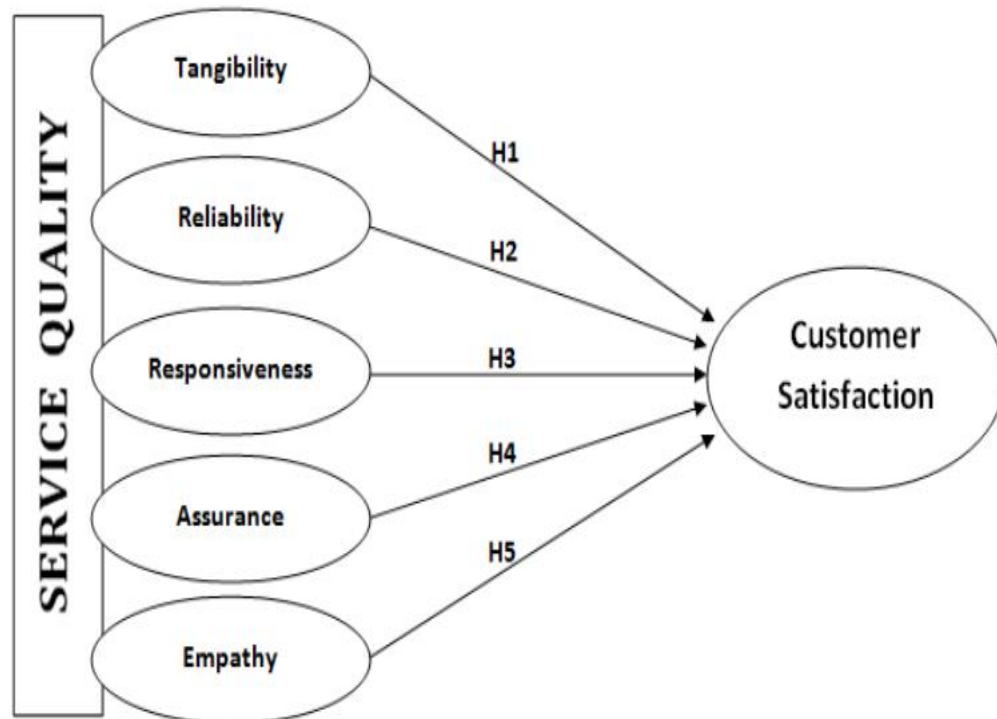
Impact of Service quality and service innovations on competitive advantage. Retail Quality of service is divided into five main indicators, namely physical aspect, reliability, personal interaction, problem-solving, and policy. Service innovation is technology, new service, interactions with customers, and service delivery systems Competitive advantage is divided into price/cost, quality, value to the customer, and product variety.



Model (2-6): Kusumadewi & Karyono (2019)

Vencataya, et. al. (2019) model:

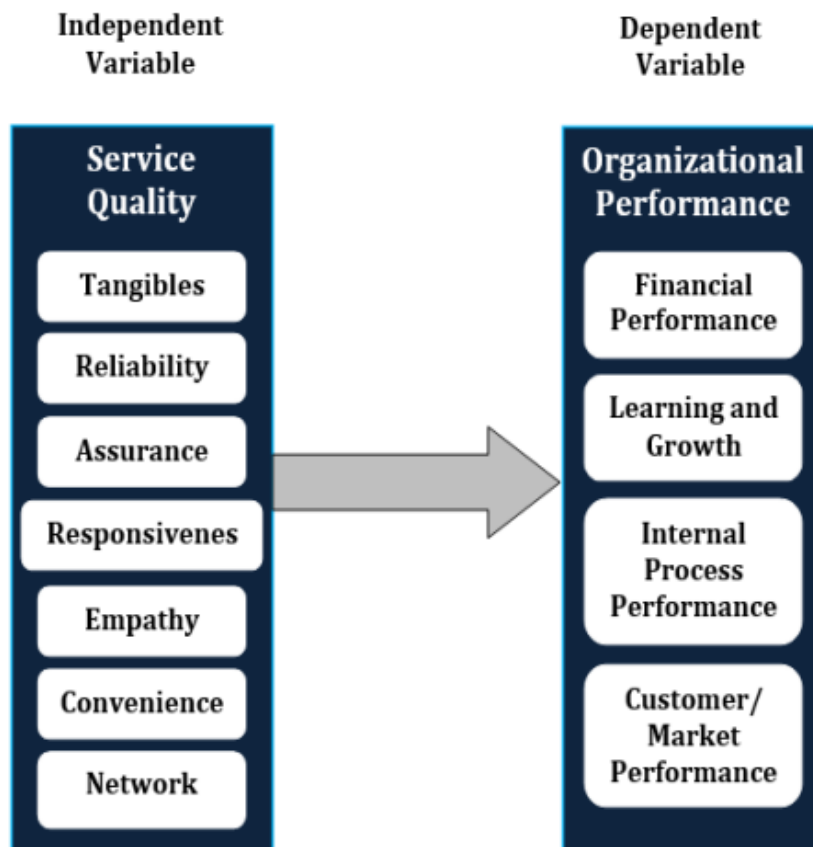
The impact of service quality dimensions concrete, reliability, responsiveness, assertiveness, and empathy on customer satisfaction.



Model (2-7): Vencataya, et.al. (2019)

El-Borsaly & Hassan (2020) model:

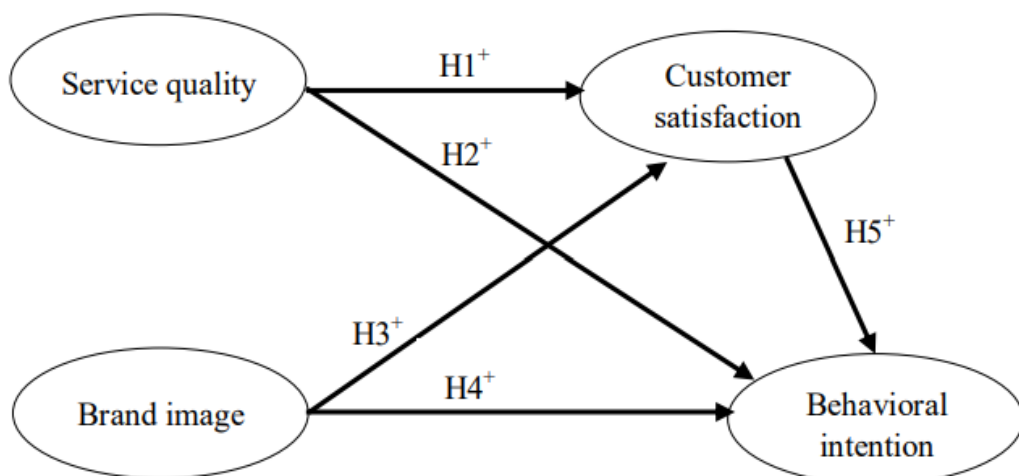
The model highlights two key themes that are related to how SQ influences OP. Impact of service quality dimensions tangibles, reliability, assurance, responsiveness, empathy, convenience, and network on organizational performance.



Model (2-8): El-Borsaly & Hassan (2020)

Cuong & Long (2020) model:

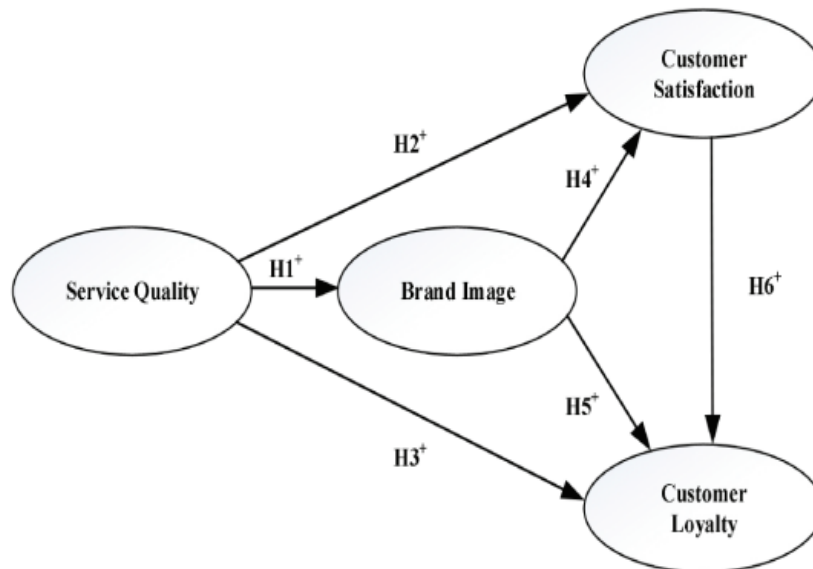
The impact of Service Quality and Brand Image on Customer Satisfaction and Behavioral Intention.



Model (2-9): Cuong & Long (2020) model.

Dam Sao & Dam Tri (2021) model:

The model presents the Relationships between Service Quality, Brand Image, Customer Satisfaction, and Customer Loyalty.



Model (2-10): Bam Sao & Dam Tri (2021)

In summary, the previous models helped to decide which sub-variables to include; understand the relationship between variables; and how they interact and affect each other.

2.5 Previous Studies:

Ojo (2010) study titled: **“The relationship between service quality and customer satisfaction in the telecommunication industry: Evidence from Nigeria”** This study investigates the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Networks in (Nigeria). 230 respondents, Descriptive statistics analysis, and Pearson product-moment correlation coefficient were employed in testing our hypotheses. The result is that service quality has an effect on customer satisfaction and that there is a positive relationship

between service quality and customer satisfaction. The study concluded by recommending that organizations should focus more attention on service quality, because of its effects on customer satisfaction. To ensure that customer satisfaction level is high.

Siddiqi (2011) study titled: **“Interrelations between service qualities attributes, customer satisfaction, and customer loyalty in the retail banking sector in Bangladesh”**, the main objective of this study is to find the interrelationships between service quality attributes, customer satisfaction, and customer loyalty in the retail banking sector in Bangladesh. A survey was conducted to collect data. The sample size of 100 retail banking customers was drawn from different banks in Bangladesh. The result shows that all the service quality attributes are positively related to customer satisfaction and customer satisfaction is positively related to customer loyalty in retail banking. Empathy demonstrates the highest positive correlation with customer satisfaction and tangibility shows the least positive correlation with customer satisfaction.

Markovic & Raspor Jankovic (2013) study titled: **” Exploring the relationship between service quality and customer satisfaction in Croatian hotel industry”**, the aim study was to examine the relationship between service quality and customer satisfaction. The main objective was to discuss the impact of perceived service quality dimensions on customer satisfaction in the hotel industry in Croatia. Methodology – The data were collected using a questionnaire, a sample of 253, in (Croatia). Use Descriptive analysis, factor analysis, reliability analysis, correlation analysis, and multiple regression analysis were performed to analyze the data. Result Factor analysis identified four dimensions of perceived service quality, namely reliability, empathy, the competence of staff, accessibility, and tangibles. Multiple regression analysis showed that reliability, accessibility, and tangibles had a significant and positive effect on overall customer

satisfaction. On the other hand, empathy and competence of staff positively influenced hotel guests' satisfaction, but this impact was not statistically significant when other dimensions were involved. These results indicate that hotel service quality is indeed a significant predictor of customer satisfaction. Thus, improving hotel service quality results in higher satisfaction levels for hotel guests.

Tan, et. al., (2014) study titled: **“Service quality and customer satisfaction in Chinese fast food sector”**, This study investigates customers' perception of Chinese fast food restaurant service quality and its relationship with customer satisfaction, the study uses both quantitative and qualitative research approaches. Qualitative data collection consisted of face-to-face interviews and group discussions, a questionnaire. A total of 205 questionnaires were used in the analysis. The findings from the study revealed that service quality variables have a positive influence on customer satisfaction except for the reliability dimension.

Khan & Fasih (2014) study titled: **“Impact of service quality on customer satisfaction and customer loyalty: Evidence from banking sector”**, the aim of this research study is to determine the satisfaction level of banking customers regarding the quality of different services provided by their bank and their loyalty to the respective bank. Using stratified random sampling. Banks from both the public and private sectors are selected for sampling. (225 respondents). Descriptive statistics, one sample t-test, correlation, and regression are used to analyze the data. Findings indicate that service quality and all its dimensions have a significant and positive association with customer satisfaction and customer loyalty.

Al-Azzam (2015) study titled: **“The impact of service quality dimensions on customer satisfaction: A field study of Arab bank in Irbid city, Jordan”**, this study

has used the model of service quality with five dimensions to evaluate its effect on customer satisfaction among Arab banks customers in the city of Irbid. . This study used simple random sampling. The convenience sampling technique was applied according to selected 400 respondents that participated in the study. In this study, the researcher used questionnaires as a medium for collecting data. , the dependent variable is customer satisfaction, and the independent variables are Service Quality. This research has applied a quantitative research approach, SPSS version 19 was used. Finally, the findings indicate that these service quality have positively affected customer satisfaction.

AL-tit (2015) study titled:” **The effect of service and food quality on customer satisfaction and hence customer retention**”, investigates the relationships between service quality, food quality, customer satisfaction, and customer retention in limited-service restaurants in Jordan. The data collected (283 valid questionnaires) were analyzed using SPSS 20.0. The findings showed that service quality has a positive influence on customer satisfaction.

AL-Mhasnah, et.al. (2018) study titled: “**The relationship between services quality and customer satisfaction among Jordanian healthcare sector**”, aimed to examine the relationship between quality of service and patient satisfaction at Hussein Hospital- Al Hussein Medical City Jordan where 350 questionnaires were distributed to the admitted patients. The study implements structural equation modeling to examine the effects of the SERVQUAL components; namely tangible, reliable, assurance, empathy, and responsiveness on customer satisfaction, the results show that quality of service dimensions affected patient satisfaction.

Alolayyan, et. al. (2018). study titled: “**Banking service quality provided by commercial banks and customer satisfaction. A structural equation modelling**

approach”, aimed to examine the impact of the constructs of service quality and customer satisfaction in commercial banks operating in Jordan. The study finds that the order of importance of the dimensions of service quality tested here is assurance; reliability; tangibles; empathy; and responsiveness. The sample includes 250 customers of the Jordanian commercial bank. This finding reinforces the need for bank managers to place an emphasis on the underlying dimensions of service quality, especially on assurance, and should start with improving service quality in order to raise customer satisfaction. The findings of the study, Assurance was especially significant in fostering satisfaction for the customers of Jordanian commercial banks

Alabboodi (2019) study titled: **“The effect of customer satisfaction on service quality: The case of Iraqi banks ‘**”, aimed to examine this study on the service quality on customer satisfaction in Iraqi banks. The components of service quality consist of assurance, reliability, tangibility, empathy, and responsiveness and are identified as the independent variable for the dependent variable, customer satisfaction was chosen. This study follows a quantitative approach; the questionnaire. The sample for this study consisted of 323 customers of Iraqi banks in Bagdad. SPSS 21 software was used to analyze the data. The results indicated that service quality components namely, assurance, reliability, tangibility, and empathy affect positively and significantly on customer satisfaction.

Cheng & Govindarajo (2020) study titled:” **The impact of service quality on customer satisfaction in a four- or five-star hotel in Klang Valley ”**, The study aims to analyze the impact of service quality on customer satisfaction in four or Five-star hotel in Klang Valley. Collected 92 respondents. The questionnaire consisted of two main sections that were distributed to respondents on a five-point Likert scale. The researcher

used a quantitative and deductive research approach, the results were tangibility, assurance, and reliability would influence the customer.

Fida, et.al. (2020) study titled:” **Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the sultanate of Oman** “This study attempts to examine the impact of service quality on customer loyalty and customer satisfaction using the SERVQUAL model for four main Islamic banks in the Sultanate of Oman. A quantitative sampling method gathering data from 120 customers of Islamic banks in Oman. The study data were analyzed using SPSS, and the reliability coefficient (Cronbach’s alpha) was established. The correlation analysis examined the significant relationships among the study variables. The impact of service quality dimensions on customer satisfaction was captured through regression analysis. Five areas, namely, (tangibles, responsiveness, reliability, assurance, and empathy). The correlation results depicted a significant relationship between the three variables: service quality, customer satisfaction, and customer loyalty. Results demonstrated that empathy and responsiveness dimensions have a significant positive impact on customer satisfaction.

Morad, et.al. (2021) study titled:” **Importance of service quality in gaining consumer satisfaction: Case study of Ooredoo mobile operator**”, the main purpose of the current study is to assess the service quality provided to customers of mobile phone operators in Algeria Ooredoo and its impact on customer satisfaction. 112 surveys were randomly distributed to mobile users in the province, based on the performance of the five dimensions model (tangibility, reliability, responsiveness, assurance, and empathy), another dimension was added (communication). The result found that there is a clear impact of service quality on customer satisfaction. Found that all five dimensions of service quality are positively and significantly correlated with customer satisfaction.

Khan, et. al. (2021) study titled: **“Understanding the service quality and customer satisfaction of mobile banking in Bangladesh: using a structural equation model”**, this article aims to understand the association between service quality and customer satisfaction, sampling method was used, 240, completed and usable, were selected for the analysis. The results showed that there are positive and significant effects of all constructs of service quality, namely, tangibility, reliability, responsiveness, assurance, and empathy on customer satisfaction using mobile banking. Particularly, responsiveness has a strong impact on customer satisfaction. Furthermore, tangibility has been identified as a less significant factor in customer satisfaction. Findings also indicate that mobile banking service providers should concentrate on all dimensions of service quality, with a special focus on responsiveness and reliability for improving their customer satisfaction.

Ali, et. al. (2021) study titled: **“Hotel service quality the impact of service quality on customer satisfaction in hospitality”**, This study is to identify service factors Quality that leads to guest satisfaction, A quantitative method was used to analyze this study. A random sampling method was used to distribute and gather data. 111 participants were involved in this study. This study proved that four service quality dimensions (empathy, responsiveness, assurance, and tangible) have a positive relationship with customer satisfaction, except reliability had a negative relation with customer satisfaction. Services through the indicators of evaluation vary from client to client and the quality of service works to achieve customer satisfaction and that there is a positive relationship between the dimensions of quality of service and customer satisfaction.

Mesri (2022) study titled:” **Modeling the impact of the quality of electronic banking services on customer satisfaction (the case of Algerian banks)**”, aim the study electronic banking services quality and their impact on the satisfaction of Algerian

bank customers, relying on a sample of 288 clients, and to solve the problem of the study, relying on the structural equations modeling method using the AMOS program. The results, the dimensions of electronic service quality contribute a lot to improving customer satisfaction.

Magasi, et.al. (2022) study titled: **"Service quality and students' satisfaction in Tanzania's higher education"**, this study assessed the effect of service quality on customer satisfaction in Tanzanian higher education, and use an examination of the SERVQUAL model. Whereas a questionnaire survey was used to collect quantitative data from a sample of 326 students from higher learning institutions. Descriptive statistics were used to compute the quality of services. The findings show that service quality was perceived by students to be below their expectations.

In summary, from the previously revised literature, it is clear that there is a significant impact of service quality on customer satisfaction. Moreover, most of the previous studies studied service quality on customer satisfaction and loyalty. This study attempts to investigate the recently developed framework for service quality, called dimensions of service quality (Servqual), (reliability, assurance, tangibility, empathy, and responsiveness) which is mainly based on practicing service quality in the company. Therefore, the significance of this study is coming from its dedication to exploring the impact of implementing the service quality of medical supplies companies on customer satisfaction in Riyadh.

2.6 Expected Contributions of the Current Study as Compared with Previous Studies:

- 1- Service quality concept: It seems that the current study is one of the studies, which considers service quality dimensions. Therefore, it aims to increase awareness about the role of service quality improvement in the company.
- 2- Purpose: the current study is out to study the impact of the service quality of medical supplies companies on customer satisfaction.
- 3- Environment: Most previous studies have been carried out in different countries outside the Arab region. The current study is carried out in Saudi Arabia, one of the Arab-world countries.
- 4- Industry: It seems that this study is the first study, which implements service quality in a medical supplier company
- 5- Methodology: The current study is based on customer satisfaction perception related to the actual implementation of service quality. Data collection through a questionnaire Assessments were based on a Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5) was used to measure the 32 items.
- 6- Population: Study in Private Hospitals in Riyadh employee department Purchasing and Supply Chain.
- 7- Comparison: The current study results are compared with previous studies' results to highlight similarities and differences that might be there and why.

Chapter Three

Study Methodology (Methods and Procedures)

3.1 Introduction

This chapter includes study design, population and sampling, data collection methods, data collection analysis, study tool, and validity and reliability test. In addition to the respondent demographic description.

3.2 Study Design

The current study is considered a qualitative and descriptive cause-effect. It aims of studying the impact of service quality of medical supplies companies on customers' satisfaction in Private hospitals in Riyadh. It starts with a literature review to develop a model for measuring the impact of Service quality of Medical Supplies Companies on customers' Satisfaction in Private Hospitals in Riyadh. Then, a panel of judges was used to improve the measurement tool, the questionnaire. Afterward, the survey was carried out and the data was collected from the Purchasing and Supply Chain Department working at Private hospitals in Riyadh. After that, the data was coded against SPSS 20. Then after checking normality, validity, and reliability, descriptive analysis was carried out, and the correlation among variables was checked. Finally, the impact was tested by multiple regressions.

3.3 Study Population, Sample, and Unit of Analysis:

The study population consisted of employees of Procurement and supply chains working in private hospitals. According to the annual statistical report of the Ministry of Health, the number of private hospitals in the capital reached (46) according to the annual statistical book of the Ministry of Health in the Kingdom of Saudi Arabia (2021), with data collected from 22 hospitals.

Unit of Analysis: The survey unit of analysis was composed 111employee of working in a private hospital department purchasing and supply chain, who were available at the time of distributing the questionnaires and ready to participate.

3.4 Data Collection Methods (Tools)

For fulfilling the purposes of the study, the data collected from two sources: secondary and primary data as follows:

Secondary Data: Secondary data is collected from different sources such as journals, working papers, research, thesis, articles, worldwide Web and.

Primary Data: To actualize this study primary data was collected from employees working in the department purchasing and supply chain through a questionnaire, which was built and developed for this purpose.

3.4.1 Study Instrument (Tool)

The Questionnaire

To actualize this study, the questionnaire was used as the main tool, which two parts, as follows:

First: questions related to demographic information (gender, age, educational qualification, years of experience, administrative level).

Second: The questions related to the study variables were divided as follows:

Independent Variable (service quality)

Contains the following sub-variables reliability, tangibility, responsiveness, assurance, and empathy. Five items were used to measure each sub-variable.

Dependent Variable (customer satisfaction).

Eight items were used to measure. All items were measured by a five-point Likert-type scale to rate respondents' actual perceptions regarding each item as follows: 1 (strongly disagree) to 5 (strongly agree).

3.4.2 Data Collection

Collected 111 questionnaires distributed to employees' procurement and supply chain. Data were collected from 22 hospitals out of 46 hospitals registered at the Ministry of Health in the Kingdom of Saudi Arabia, from October to December 2022. All collected questionnaires were complete and suitable and coded against SPSS 20.

3.4.2.1 Validity Test

The tool's validity was confirmed by using three methods: content, face, and construct. The content validity was confirmed by collecting the data from multiple literature resources such as books, journals, working papers, research, thesis, dissertations, articles, and worldwide Web. Moreover, the face validity was confirmed through the board of judges, which judged the questionnaire (see appendix 1).

Construct validity (Factor Analysis)

The construct validity was confirmed using Principal Component Factor Analysis with Kaiser Meyer Olkin (KMO). The data explanatory and conformity were examined using Principal Factor Analysis. Factor loading more than 0.4 is good and accepted if it is exceeding 0.40 (Hair, et. al. 2014). However, Kaiser Meyer Olkin (KMO) is used to measure sampling adequacy, harmony, and inter-correlations, KMO values between 0.8 and 1 indicate that a high sampling is adequacy, and is accepted if it is exceeding 0.6. Another indicator is Bartlett's of Sphericity used for the determination of the suitability of data and correlation, where if the significant value of data is less than 0.05 at a 95%

confidence level, that indicates a useful factor analysis. Variance percentage shows the explanation power of factors (Cerny & Kaiser, 1977).

Tangibility

Table (3-1) shows that the loading factor of tangibility items scored between 0.410 and 0.827. Therefore, construct validity is assumed. KMO has rated 70.4%, which indicates good adequacy, and the Chi² is 150.188, which indicates the fitness of the model. Moreover, the variance percentage is 50.179, so it can explain 50.179% of the variation. Finally, the significance of Bartlett's Sphericity is less than 0.05, which indicates the factor analysis is useful.

Table (3-1): Principal Component Analysis Procurement and Sourcing

| No. | Item | FI | KMO | CHI ² | BTS | Var% | Sig. |
|-----|---|------|-------|------------------|-----|--------|-------|
| 1 | The company develops a presentable external appearance. | .791 | 0.704 | 150.188 | 10 | 50.179 | 0.000 |
| 2 | The company concerns with the staff's appearance. | .668 | | | | | |
| 3 | The company provides parking areas. | .821 | | | | | |
| 4 | The company provides electronic transactions. | .827 | | | | | |
| 5 | The company develops transportation logistics. | .410 | | | | | |

Principal Component Analysis.

Empathy

Table (3-2) shows that the loading factor of Empathy items scored between 0.623 and 0.863. Therefore, construct validity is assumed. KMO has rated 79.9%, which indicates good adequacy, and the Chi² is 150.188, which indicates the fitness of the model. Moreover, the variance percentage is 74.583, so it can explain 74.58% of the variation. Finally, the significance of Bartlett's Sphericity is less than 0.05, which indicates the factor analysis is useful.

Table (3- 2): Principal Component Analysis Empathy

| No. | Item | FI | KMO | CHI ² | BTS | Var% | Sig. |
|-----|---|------|-------|------------------|-----|---------|-------|
| 6 | The company gives attention to each customer. | .769 | 0.799 | 414.006 | 10 | 74.583. | 0.000 |
| 7 | The company treats customers with respect. | .730 | | | | | |
| 8 | The company solves the customers' problems. | .745 | | | | | |
| 9 | The company provides extra service. | .623 | | | | | |
| 10 | The company offers alternative solutions to the customer. | .863 | | | | | |

Principal Component Analysis.**Reliability**

Table (3-3) shows that the loading factor of Reliability items scored between 0.631 and 0.797. Therefore, construct validity is assumed. KMO has rated 81.7%, which indicates good adequacy, and the Chi² is 338.049, which indicates the fitness of the model. Moreover, the variance percentage is 72.034, so it can explain 72.03% of the variation. Finally, the significance of Bartlett's Sphericity is less than 0.05, which indicates the factor analysis is useful.

Table (3- 3): Principal Component Analysis Reliability

| No. | Item | FI | KMO | CHI ² | BTS | Var% | Sig. |
|-----|--|------|-------|------------------|-----|--------|-------|
| 11 | The company provides the right service to the right customer | .762 | 0.817 | 338.049 | 10 | 72.034 | 0.000 |
| 12 | The company provides accurate information. | .743 | | | | | |
| 13 | The company provides services on time. | .797 | | | | | |
| 14 | The company coordinates delivery changes with its customers. | .631 | | | | | |
| 15 | The company offers transparent costs to the customer. | .668 | | | | | |

Principal Component Analysis.

Assurance

Table (3-4) shows that the loading factor of Assurance items scored between 0.497 and 0.800. Therefore, construct validity is assumed. KMO has rated 70.9%, which indicates good adequacy, and the Chi² is 255.596, which indicates the fitness of the model. Moreover, the variance percentage is 60.720, so it can explain 60.72% of the variation. Finally, the significance of Bartlett's Sphericity is less than 0.05, which indicates the factor analysis is useful.

Table (3- 4): Principal Component Analysis Assurance

| No. | Item | FI | KMO | CHI ² | BTS | Var% | Sig. |
|-----|--|------|-------|------------------|-----|--------|-------|
| 16 | The company makes you feel safe. | .708 | 0.709 | 255.596 | 10 | 60.720 | 0.000 |
| 17 | The company maintains credibility with the customer. | .800 | | | | | |
| 18 | The company provides transparent prices. | .497 | | | | | |
| 19 | The company maintains the invoices. | .500 | | | | | |
| 20 | The company provides quantity as required. | .531 | | | | | |

Principal Component Analysis.

Responsiveness

Table (3-5) shows that the loading factor of Responsiveness items scored between 0.661 and 0.909. Therefore, construct validity is assumed. KMO has rated 70.9%, which indicates good adequacy, and the Chi² is 433.311, which indicates the fitness of the model. Moreover, the variance percentage is 75.916, so it can explain 75.92% of the variation. Finally, the significance of Bartlett's Sphericity is less than 0.05, which indicates the factor analysis is useful.

Table (3- 5): Principal Component Analysis Responsiveness

| No. | Item | FI | KMO | CHI ² | BTS | Var% | Sig. |
|-----|---|------|-------|------------------|-----|--------|-------|
| 21 | The company responds to customers' requests. | .685 | 0.842 | 433.311 | 10 | 75.916 | 0.000 |
| 22 | The company responds to customers at any time. | .743 | | | | | |
| 23 | The company cares about customer complaints. | .798 | | | | | |
| 24 | The company uses logistics careers to reduce delivery time. | .661 | | | | | |
| 25 | The company provides a clear answer to customer inquiries. | .909 | | | | | |

Principal Component Analysis.**Customer Satisfaction:**

Table (3-6) shows that the loading factor of Customer Satisfaction items scored between 0.537 and 0.843. Therefore, construct validity is assumed. KMO has rated 70.9%, which indicates good adequacy, and the Chi² is 903.369, which indicates the fitness of the model. Moreover, the variance percentage is 71.249, so it can explain 71.25% of the variation. Finally, the significance of Bartlett's Sphericity is less than 0.05, which indicates the factor analysis is useful.

Table (3- 6): Principal Component Analysis Customer Satisfaction

| . | Item | FI | KMO | CHI ² | BTS | Var% | Sig. |
|----|--|------|-------|------------------|-----|--------|-------|
| 26 | The company provides standard services. | .791 | 0.789 | 903.369 | 28 | 71.249 | 0.000 |
| 27 | The company meets customer expectations. | .843 | | | | | |
| 28 | The company offers feedback to customers. | .639 | | | | | |
| 29 | The company provides consistent services. | .738 | | | | | |
| 30 | The company conducts a customer satisfaction survey. | .671 | | | | | |
| 31 | The company personalizes the services according to the customer. | .828 | | | | | |
| 32 | The company provides good hospitality to customers. | .652 | | | | | |
| 33 | The company respects the customers personally. | .537 | | | | | |

Principal Component Analysis.

Service Quality

Table (3-7) shows that the loading factor of Service Quality items scored between 0.806 and 0.880. Therefore, construct validity is assumed. KMO has rated 79.9%, which indicates good adequacy, and the Chi^2 is 637.043, which indicates the fitness of the model. Moreover, the variance percentage is 85.039, so it can explain 85.04% of the variation. Finally, the significance of Bartlett's Sphericity is less than 0.05, which indicates the factor analysis is useful.

Table (3-7): Principal Component Analysis Service Quality

| No. | Item | FI | KMO | CHI ² | BTS | Var% | Sig. |
|-----|----------------|------|-------|------------------|-----|--------|-------|
| 1 | Tangibility | .806 | 0.799 | 637.043 | 10 | 85.093 | 0.000 |
| 2 | Empathy | .852 | | | | | |
| 3 | Reliability | .879 | | | | | |
| 4 | Assurance | .838 | | | | | |
| 5 | Responsiveness | .880 | | | | | |

Principal Component Analysis.

3-4-2-2 Reliability Test:

The data reliability is examined through Cronbach's alpha, the reliable tools have a Cronbach's alpha above 0.70, and are accepted if it is exceeding 0.60 (Hair, et. al. 2014). Table (3-8) shows that the reliability coefficient for Service quality sub-variables ranges between 0.73 and 0.91, and for Customer Satisfaction 0.93.

Table (3- 8): Reliability Test for all Variables

| Study variables | | Items/Sub-Variables | Cronbach Alpha Coefficients |
|----------------------|------------------------------|-----------------------|-----------------------------|
| Independent variable | Tangibility | 5 | 0.73 |
| | Empathy | 5 | 0.90 |
| | Reliability | 5 | 0.88 |
| | Assurance | 5 | 0.81 |
| | Responsiveness | 5 | 0.91 |
| | Service Quality | 5 Sub-Variable | 0.96 |
| Dependent variable | Customer Satisfaction | 8 | 0.93 |

3-4-2-3 Demographic Analysis:

The demographic analysis presented in the below sections is based on the characteristics of the valid respondent i.e., frequency and percentage of participants such as gender, age, education, experience, and department.

Gender: Table (3-9) shows that the majority of respondents are males, where 75 (67.6%), and only 36 (32.4%) are females. Perhaps this is due to the nature of the job, which requires more males than females.

Table (3- 9): Respondents' Gender

| variable | Category | Frequency | Percent |
|----------|----------|-----------|---------|
| Gender | Female | 36 | 32.4 |
| | Male | 75 | 67.6 |
| Total | | 111 | 100 |

Age: Table (3-10) shows that the majority of respondents ages are above 35 years 63 (56.8%) out of the total sample, then those ages between (26-35 years) 34 (30.6%), after that the respondents' age between (18-25 years) 14 (12.6%). This is due to the fact that the nature of the chosen job requires that its incumbents be experienced, which requires that they be of the older age group.

Table (3-10): Respondents' Age

| variable | Category | Frequency | Percent |
|-------------|----------|-----------|---------|
| Age (years) | 18 - 25 | 14 | 12.6 |
| | 26 - 35 | 34 | 30.6 |
| | Above 35 | 63 | 56.8 |
| Total | | 111 | 100 |

Education: Table (3-11) shows that the majority of respondents hold a bachelor's degree 70 (63.1%), 23 (20.7%) have a master's degree, 15 (13.5%) have a Diploma degree, finally 3 (2.7%) have Ph.D. degree. This is due to the fact that the nature of the job of the Supply Chain and Procurement Department requires that its occupants be holders of a university degree

Table (3-11): Respondents' Education

| variable | Category | Frequency | Percent |
|-----------|----------|-----------|---------|
| Education | Bachelor | 70 | 63.1 |
| | Diploma | 15 | 13.5 |
| | Mater | 23 | 20.7 |
| | Ph.D. | 3 | 2.7 |
| Total | | 111 | 100 |

Experience: Table (3-12) shows that the majority of respondents are having experience between (11-15 years) 36 (32.4%), then respondents experience more than 15 years 34 (30.6%), then respondents between (6-10 years) 23 (20.7%), followed by those with experience less 5 years 18 (16.2%).

Table (3-12): Respondents' Experience

| variable | Category | Frequency | Percent |
|------------|--------------|-----------|---------|
| Experience | Less than 5 | 18 | 16.2 |
| | 6-10 | 23 | 20.7 |
| | 11-15 | 36 | 32.4 |
| | More than 15 | 34 | 30.6 |
| Total | | 111 | 100 |

The percentage of (42.3%) of the study sample members are from the procurement department, and (35.1%) are from the supply chain, (22.5%) are from other departments.

Department: Table (3-13) shows that the majority of respondents are from procurement 47 (42.3%), then from supply chain 39 (35.1%).

Table (3- 13): Respondents' Department

| variable | Category | Frequency | Percent |
|------------|--------------|-----------|---------|
| Department | Procurement | 47 | 42.3 |
| | Supply Chain | 39 | 35.1 |
| | Other | 25 | 22.5 |
| Total | | 111 | 100 |

Chapter Four

Data analysis results and hypothesis testing

4.1 Introduction:

This chapter includes a presentation of the results of the statistical analysis of the answers and estimates of the study sample on the independent and dependent variables of the study in their dimensions to answer the study questions by finding the means, standard deviations, estimation scores, and the Pearson correlation test, and testing the study hypotheses using multiple linear regression analysis

4.2 Descriptive Statistical Analysis:

The mean, standard deviation, t-value, ranking, and implementation level are used to describe the respondents' perception and the degree of implementing of each variable, dimension, and item. The implementation level is divided into three categories based on the following formula:

$$\frac{5 - 1}{3} = 1.333$$

Therefore, the implementation is considered high if it is within the range of 3.68-5.00 and medium if it is between 2.34 and 3.67 and low implementation are between 1.00 and 2.33.

Independent Variable (Service Quality):

In order to answer the first study question, the arithmetic means standard deviations, t and significant value, and rank and level of independent study variable with its dimensions.

Table (4-1) shows that the means of service quality sub-variables range from 4.08 to 4.38 with a standard deviation between 0.537 and 0.827. This indicates that respondents agree on the high implementation of service quality sub-variables that is supported by

high t-value compared to T-tabulated. The average mean is 4.18 with a standard deviation of 0.663, which indicates that the respondents are highly aware and concerned about service quality, where the t-value is $18.744 > T\text{-tabulated} = 1.960$.

Table (4-1): Mean, Standard Deviation, t-value, Ranking, and Implementation Level of Supply "Service quality"

| No. | Variable | M. | S.D. | t | Sig | Rank | Impl. |
|-----|------------------------|-------------|--------------|---------------|-------------|------|-------------|
| 1 | Tangibility | 4.38 | 0.537 | 27.048 | .000 | 1 | High |
| 2 | Empathy | 4.24 | 0.772 | 16.946 | .000 | 2 | High |
| 3 | Reliability | 4.08 | 0.775 | 14.654 | .000 | 4 | High |
| 4 | Assurance | 4.13 | 0.679 | 17.548 | .000 | 3 | High |
| 5 | Responsiveness | 4.08 | 0.827 | 13.721 | .000 | 4 | High |
| | Service Quality | 4.18 | 0.663 | 18.744 | .000 | | High |

T-tabulated=1.960

1) Tangibility

Table (4-2) shows that the means of tangibility items range from 4.14 to 4.64 with a standard deviation between 0.644 and 0.929. This indicates that respondents agree on the high implementation of tangibility items, this is supported by a high t-value compared to the T-tabulated value for all items. The average mean is 4.38 with a standard deviation of 0.537, which indicates that the respondents are highly aware and concerned about tangibility, where the t-value is $27.048 > T\text{-tabulated} = 1.960$.

Table (4-2): Mean, Standard Deviation, t-value, Ranking, and Implementation Level of "Tangibility"

| No. | | M. | S.D. | t | Sig. | Rank | Impl. |
|-----|---|-------------|-------------|---------------|-------------|------|-------------|
| 1 | The company develops a presentable external appearance. | 4.27 | .841 | 15.904 | .000 | 4 | High |
| 2 | The company concerns with the staff's appearance. | 4.50 | .686 | 23.110 | .000 | 2 | High |
| 3 | The company provides parking areas. | 4.14 | .929 | 12.871 | .000 | 5 | High |
| 4 | The company provides electronic transactions. | 4.64 | .644 | 26.834 | .000 | 1 | High |
| 5 | The company develops transportation logistics. | 4.34 | .745 | 18.993 | .000 | 3 | High |
| | Tangibility | 4.38 | .537 | 27.048 | .000 | | High |

T-tabulated=1.960

2) Empathy:

Table (4-3) shows that the means of Empathy items range from 3.90 to 4.58 with a standard deviation between 0.626 and 0.987 this indicates that respondents agree on the high implementation of empathy items, this is supported by a high t-value compared to T tabulated. The average mean is 4.24 with a standard deviation of 0.772, which indicates that the respondents are highly aware and concerned about empathy, where the t-value is $16.946 > T\text{-tabulated} = 1.960$.

Table (4-3): Standard Deviation, t-value, Ranking, and Implementation Level of "Empathy"

| No. | | M. | S.D. | t | Sig. | Rank | Impl. |
|-----|---|-------------|-------------|---------------|-------------|------|-------------|
| 6 | The company gives attention to each customer. | 4.31 | .861 | 15.981 | .000 | 2 | High |
| 7 | The company treats customers with respect. | 4.58 | .626 | 26.536 | .000 | 1 | High |
| 8 | The company solves the customers' problems. | 4.26 | .922 | 14.419 | .000 | 3 | High |
| 9 | The company provides extra service. | 3.90 | .987 | 8.477 | .000 | 5 | High |
| 10 | The company offers alternative solutions to the customer. | 4.16 | .949 | 12.901 | .000 | 4 | High |
| | Empathy | 4.24 | .772 | 16.946 | .000 | | High |

T-tabulated=1.960

3) Reliability:

Table (4-4) shows that the means of reliability items range from 3.55 to 4.28 with a standard deviation between 0.793 and 0.932 this indicates that respondents agree on medium to high implementation of reliability items, this is supported by high t-value compared to T tabulated. The average mean is 4.08 with a standard deviation of 0.775, which indicates that the respondents are highly aware and concerned about reliability, where the t-value is $14.654 > T\text{-tabulated} = 1.960$.

Table (4-4): Mean, Standard Deviation, t-value, Ranking, and Implementation Level of "Reliability."

| No. | | M. | S.D. | t | Sig. | Rank | Impl. |
|-----|--|-------------|-------------|---------------|-------------|------|-------------|
| 11 | The company provides the right service to the right customer | 4.21 | .798 | 15.801 | .000 | 2 | High |
| 12 | The company provides accurate information. | 4.28 | .865 | 15.578 | .000 | 1 | High |
| 13 | The company provides services on time. | 4.21 | .832 | 15.147 | .000 | 2 | High |
| 14 | The company coordinates delivery changes with its customers. | 4.12 | .793 | 14.523 | .000 | 3 | High |
| 15 | The company offers transparent costs to the customer. | 3.55 | .932 | 4.459 | .000 | 4 | High |
| | Reliability | 4.08 | .775 | 14.654 | .000 | | High |

T-tabulated=1.960

4) Assurance:

Table (4-5) shows that the means of assurance items range from 3.53 to 4.56 with a standard deviation between 0.598 and 0.991 this indicates that respondents agree on medium to high implementation of assurance items, this is supported by high t-value compared to T tabulated. The average mean is 4.13 with a standard deviation of 0.679, which indicates that the respondents are highly aware and concerned about assurance, where the t-value is $17.548 > T\text{-tabulated} = 1.960$.

Table (4- 5): Mean, Standard Deviation, t-value, Ranking, and Implementation Level of "Assurance."

| No. | | M. | S.D. | t | Sig. | Rank | Impl. |
|-----|--|-------------|-------------|---------------|-------------|------|-------------|
| 16 | The company makes you feel safe. | 4.10 | .796 | 14.377 | .000 | 4 | High |
| 17 | The company maintains credibility with the customer. | 4.18 | .789 | 15.768 | .000 | 3 | High |
| 18 | The company provides transparent prices. | 3.53 | .991 | 4.457 | .000 | 5 | High |
| 19 | The company maintains the invoices. | 4.56 | .598 | 27.447 | .000 | 1 | High |
| 20 | The company provides quantity as required. | 4.26 | .922 | 14.419 | .000 | 2 | High |
| | Assurance | 4.13 | .679 | 17.548 | .000 | | High |

T-tabulated=1.960

5) Responsiveness:

Table (4-6) shows that the means of responsiveness items range from 3.91 to 4.35 with a standard deviation between 0.801 and 0.989 this indicates that respondents agree on the high implementation of responsiveness items, this is supported by high t-value compared to T tabulated. The average mean is 4.08 with a standard deviation of 0.679, which indicates that the respondents are highly aware and concerned about responsiveness, where the t-value is $13.721 > T\text{-tabulated} = 1.960$.

Table (4- 6): Mean, Standard Deviation, t-value, Ranking, and Implementation Level of "Responsiveness"

| No. | | M. | S.D. | t | Sig. | Rank | Impl. |
|-----|---|-------------|-------------|---------------|-------------|------|-------------|
| 21 | The company responds to customers' requests. | 4.35 | .805 | 17.684 | .000 | 1 | High |
| 22 | The company responds to customers at any time. | 3.96 | .987 | 8.881 | .000 | 4 | High |
| 23 | The company cares about customer complaints. | 4.12 | .951 | 12.376 | .000 | 2 | High |
| 24 | The company uses logistics careers to reduce delivery time. | 3.91 | .989 | 9.454 | .000 | 5 | High |
| 25 | The company provides a clear answer to customer inquiries. | 4.05 | .846 | 13.011 | .000 | 3 | High |
| | Responsiveness | 4.08 | .827 | 13.721 | .000 | | High |

T-tabulated=1.960

Dependent variable (Customer Satisfaction):

In order to answer the second study question, the arithmetic means, standard deviations, t-value, Ranking, and Implementation Level were found for the dependent study variable with its paragraphs.

Table (4-7) shows that the means of customer satisfaction items range from 4.10 to 4.23 with a standard deviation between 0.774 and 0.889 This indicates that respondents agree on the high implementation of customer satisfaction items; this is supported by high t-value compared to T-tabulated. The average mean is 4.20 with a standard deviation of 0.731, which indicates that the respondents are highly aware and concerned about customer satisfaction, where the t-value is $17.270 > T\text{-tabulated} = 1.960$.

Table (4- 7): Mean, Standard Deviation, t-value, Ranking, and Implementation Level of "Customer Satisfaction"

| No. | | M. | S.D. | t | Sig. | Rank | Impl. |
|-----|--|-------------|-------------|---------------|-------------|------|-------------|
| 26 | The company provides standard services. | 4.10 | .953 | 12.150 | .000 | 7 | High |
| 27 | The company meets customer expectations. | 4.18 | .795 | 15.368 | .000 | 4 | High |
| 28 | The company offers feedback to customers. | 4.22 | .814 | 15.750 | .000 | 1 | High |
| 29 | The company provides consistent services. | 4.23 | .774 | 16.799 | .000 | 2 | High |
| 30 | The company conducts a customer satisfaction survey. | 4.21 | .896 | 14.201 | .000 | 3 | High |
| 31 | The company personalizes the services according to the customer. | 4.14 | .847 | 14.115 | .000 | 6 | High |
| 32 | The company provides good hospitality to customers. | 4.17 | .889 | 11.729 | .000 | 5 | High |
| 33 | The company respects the customers personally. | 4.32 | .811 | 17.207 | .000 | 1 | High |
| | Customer Satisfaction | 4.20 | .731 | 17.270 | .000 | | High |

T-tabulated=1.960

Relationship between Independent and Dependent Variables:

Bivariate Pearson Correlation Test has been used to check the relationship between variables, and to answer the third question of the study. Table (4-8) shows that the relationships among customer service sub-variables are strong, where r ranges from 0.734 to 0.876. Finally, the relationship between independent and dependent variables is very strong, where r equals 0.911.

Table (4-8): Relationship between Independent and Dependent Variables

| No. | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|-----------------------|--------|--------|--------|--------|--------|--------|---|
| 1 | Tangibility | | | | | | | |
| 2 | Empathy | .846** | | | | | | |
| 3 | Reliability | .746** | .848** | | | | | |
| 4 | Assurance | .761** | .734** | .876** | | | | |
| 5 | Responsiveness | .794** | .828** | .850** | .851** | | | |
| 6 | Service Quality | .886** | .924** | .942** | .915** | .942** | | |
| 7 | Customer Satisfaction | .795** | .901** | .857** | .751** | .882** | .911** | |

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

4.3 Hypothesis Testing:

After confirming validity, reliability, and correlation between independent and dependent variables, the following tests should be carried out to ensure the validity of regression analysis. (Sekaran, 2003):

Normality: Figure (4-1) shows that the shape follows the normal distribution, in such case the model does not violate this assumption.

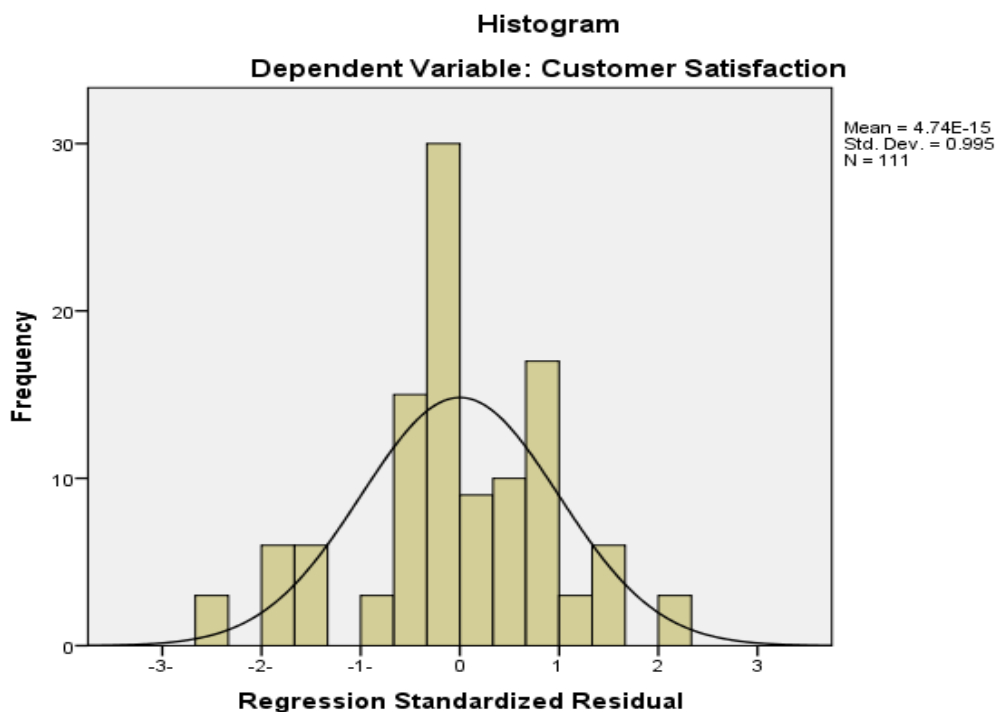


Figure (4-1): Normality Test

Linearity test: figure (4-2) shows that there is a linear relationship between independent and dependent variables. In such a case, the model does not violate this assumption.

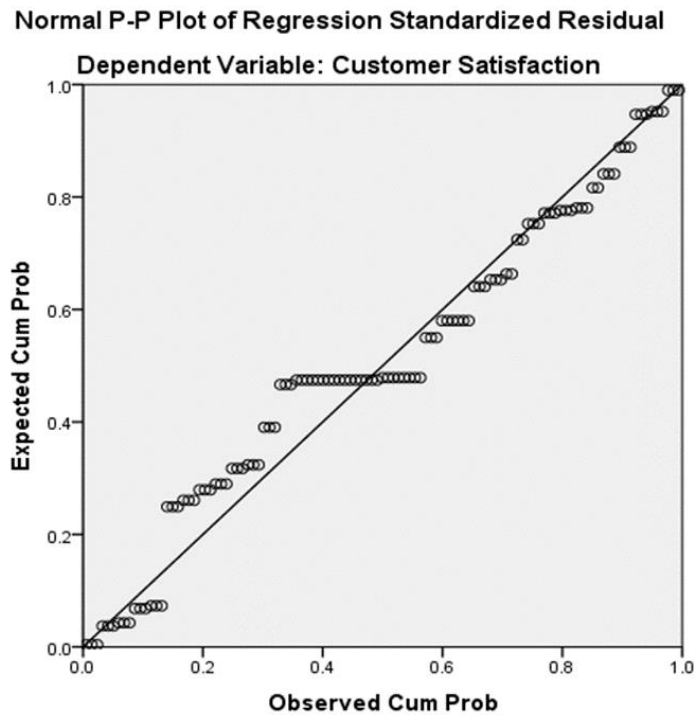


Figure (4-2). Linearity Test

Equal variance (homoscedasticity): figure (4-3) shows that the errors are scattered around the mean, therefore there is no relation between errors and predicted values, and in such case, the model does not violate this assumption.

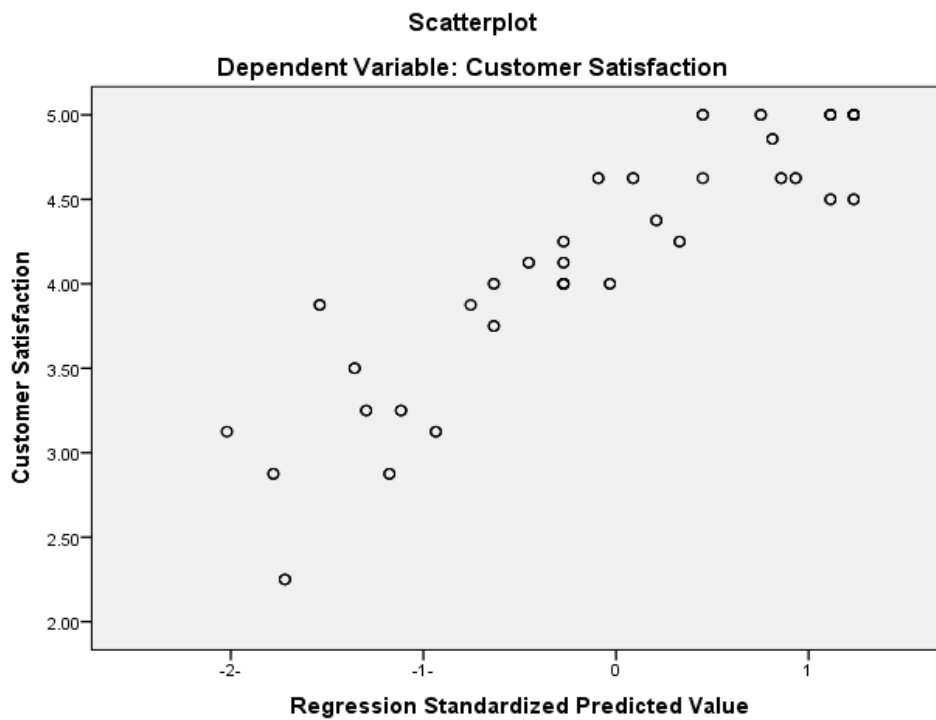


Figure (4- 3): Linearity Test

Multi-Collinearity: the VIF (Variance Inflation Factor) value is less than 10, and tolerance is more than 10%, in such case the Collinearity model does not violate this assumption.

Table (4- 9): Tolerance and Variance Inflation Factor

| Sub-Variabes | Collinearity Statistics | |
|-----------------------|-------------------------|-------|
| | Tolerance | VIF |
| Tangibility | 0.222 | 3.512 |
| Empathy | 0.147 | 2.81 |
| Reliability | 0.130 | 3.69 |
| Assurance | 0.157 | 2.35 |
| Responsiveness | 0.182 | 1.494 |

Main Hypothesis:

H01: service quality does not impact customers' satisfaction in private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Table (4-10) shows that when regressing the five sub-variables of service quality against the total of customer satisfaction, the model shows that service quality can explain

88.1% of the variation of Customers satisfaction, where ($R^2=0.881$, $F=155.978$, $Sig.=0.000$). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that: There is an impact of service quality on customers' satisfaction in private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Table (4- 10): The results of testing the impact of service quality on customers' satisfaction

| Model | R | R ² | Adjusted R Square | Std. Error of the Estimate | F | Sig. |
|-------|-------------------|----------------|-------------------|----------------------------|---------|-------------------|
| 1 | .939 ^a | .881 | .876 | .25761 | 155.978 | .000 ^b |

a. Predictors: (Constant), Responsiveness, Tangibility, Reliability, Assurance, Empathy

Based on the components of service quality, table (4-11) shows the impact of each sub-variable on customer satisfaction, where four of them impacted customer satisfaction, the highest impact was for In- Responsiveness with 45.1% of the total impact and followed by Empathy with an impact of 41.2% on customer satisfaction, then Reliability rated 27.5%, and finally, Assurance rated 20.7%, while, the Tangibility does not significantly effect on customer satisfaction.

Table (4-11): Multiple Regressions of service quality sub-variables on customer satisfaction (ANOVA).

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .543 | .219 | | 2.478 | .015 |
| | Tangibility | .054 | .097 | .040 | .554 | .581 |
| | Empathy | .390 | .083 | .412 | 4.696 | .000 |
| | Reliability | .260 | .088 | .275 | 2.951 | .004 |
| | Assurance | .222 | .091 | .207 | 2.439 | .016 |
| | Responsiveness | .399 | .070 | .451 | 5.730 | .000 |

a. Dependent Variable: Customer Satisfaction, T -Tabulated = 1.96

The results of testing the sub-hypotheses:

From the result shown in table (4-11), we conclude that:

H_{01.1}: Tangibility does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Table (4.11) shows that there is a significant impact of tangibility on customer satisfaction. Tangibility does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$). at ($B = 0.040$, $T = 0.554$, $Sig = 0.581$), while tangibility does not significantly impact customer satisfaction.

H_{01.2}: Reliability does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Table (4.1) shows that there is a significant effect of Reliability on customer satisfaction, ($B = .275$, $T = 2.439$, $Sig = .016$) Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted, which states that reliability affects customers' satisfaction in private hospitals in Riyadh, at ($\alpha \leq 0.05$).

H_{01.3}: Responsiveness does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Table (4.1) shows that there is a significant effect of Responsiveness on customers' satisfaction in major private hospitals in Riyadh, at ($B = .451$, $T = 5.730$, $Sig = .000$) Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that responsiveness affects customers' satisfaction in private hospitals in Riyadh, at ($\alpha \leq 0.05$).

H_{01.4}: Assurance does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Table (4.11) shows that there is a significant effect of Assurance on customers' satisfaction in major private hospitals in Riyadh, at ($B = .207$, $T = 2.439$, $Sig = .016$) Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which

states that assurance effects on customers' satisfaction in private hospitals in Riyadh, at ($\alpha \leq 0.05$).

H_{01.5}: Empathy does not impact customers' satisfaction in major private hospitals in Riyadh, at ($\alpha \leq 0.05$).

Table (4.11) shows that there is a significant effect of Empathy on customers' satisfaction in major private hospitals in Riyadh, at ($B = .412$, $T = 4.696$, $Sig = 0.000$). Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted which states that empathy affects customers' satisfaction in private hospitals in Riyadh, at ($\alpha \leq 0.05$).

In summary, the result of multiple regressions analysis shows that the service quality sub-variables affect Customer satisfaction, where ($R^2 = .881$, $F = 155.978$, $Sig = 0.000$). Moreover, only four sub-variables of service quality affect Customer satisfaction. Responsiveness's highest impact was rated at 45.1%, then empathy rated at 41.2%, followed by reliability at 27.5% rated, and finally assurance rated at 20.7%. While the tangibility does not significantly affect Customer satisfaction.

Chapter Five

Results Discussion, Conclusion, and Recommendations

5.1 Results Discussion

Results show that the services quality sub-variables are highly implemented in medical supplies companies. Tangibility has rated the highest, followed by empathy then assurance then reliability, and responsiveness. This is meaning medical supplies company's managers realize the importance of the service quality implications. This result was supported by the following studies that mentioned the importance of the impact of service quality on customer satisfaction. The result of this study agreed with the study of (Fida, et.al.2020; AL-tit, 2015; Al-Mhasnah, et.al.2018; Alolayyan, et. al. 2018; Alabboodi, 2019).

The results of the study showed tangibility does not impact customers' satisfaction in major private hospitals in Riyadh. The result of this study conflicts with the study of (Ali, et. al. 2021; Morad, et.al. 2021), and with the study of (Cheng & Govindarajo, 2020).

The results of the study showed that reliability impact customers' satisfaction. The result of this study agreed with the study of (Morad, et.al. 2021; Cheng & Govindarajo, 2020). Provide accurate information to customers and provide services on time.

The results of the study showed that Responsiveness impact customer satisfaction. The result of this study agreed with the study (Ali et. al. 2021; Morad, et.al. 2021; Fida, et.al. 2020). Due to the fact that the speed of response at any time has a significant impact on customer satisfaction.

- The results of the study showed that assurance impact customers satisfaction. The result of this study agreed with the study of (Morad, et.al. 2021; Alolayyan, et. al.

2018; Cheng & Govindarajo (2020). due to the fact that the feeling of safety and credibility has a significant impact on customer satisfaction.

- The results of the study showed that empathy impacts customers' satisfaction. The result of this study agreed with the study Ali et. al. (2021), and the study of Morad, et.al. (2021). due to the fact that caring about the customer leads to obtaining his satisfaction.

5.2 Conclusion

This study is dedicated to answering the study's main question: Does service quality impact customers' satisfaction in private hospitals in Riyadh? Data was collated via a questionnaire, which was tested for its validity and reliability. Then correlation and multiple regressions were used to test the hypothesis. The results of this study show the high implementation of service quality in private hospitals in Riyadh. The Tangibility has rated highest implementation, followed by empathy, then assurance, then reliability, and responsiveness. Moreover, the findings show that high implementation of customer satisfaction, results indicates that there is a significant impact of the total service quality on customer satisfaction in private hospitals in Riyadh. Moreover, responsiveness has rated the highest impact on customer satisfaction, then empathy, followed by reliability, and finally, assurance. While tangibility does not show a significant impact on customer service.

5.3 Recommendation:

5.3.1 Recommendations for medical supplies companies in Riyadh.

- The study recommends that the medical supplies companies must work on service quality for all sub-variables together because it is strongly associated.

- The study recommends that service quality implementations affect customer satisfaction and may help to promote the company's market position.
- The study recommends that medical supply companies should develop logistics functions to reduce delivery time.
- The study recommends that medical supplies companies provide clear prices.
- The study recommends following up on complaints and improving the quality of services.

5.3.2 Recommendations for Academics and Future Research:

- The study recommends studying the impact of service quality on customer loyalty.
- This study is carried out on medical supply company service quality in Riyadh. To be able to generalize the current study results, it is recommended to conduct such a study on the same companies in other countries.
- This study was carried out within a limited period; therefore, it is advised to repeat this study after a suitable time to check companies' development in service quality.
- It is advised to apply the same variables to government hospitals.

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Appendixes

Appendixes 1: Panel of referees committee:

| No. | Name | Qualification | Organization |
|-----|----------------------------|-----------------|------------------------------------|
| 1 | Prof. Ahmed Ali Saleh | Professor | Middle East University |
| 2 | Prof. Azzam Abu Moghli | Professor | Middle East University |
| 3 | Prof. Jamal Mustafa Joudeh | Professor | Applied Science Private University |
| 4 | Dr. Ali Eladaileh | Associate Prof. | Middle East University |
| 5 | Dr. Dina Alkhodary | Associate Prof. | Middle East University |
| 6 | Dr. Dhyaa Qasem | Associate Prof. | Al-Zaytoonah University |
| 7 | Dr. Nafez Nimer Hassan | Associate Prof. | Al-Zaytoonah University |

Appendix 2: Letter and Questionnaire of Respondents:

Dear Mr. /Dr.....

May I request you to answer the below questionnaire, which related to Master thesis titled:

**The Impact of the Medical Supplies Companies Service Quality on Customers' Satisfaction:
Field Study on major Private Hospitals in Riyadh.**

The questionnaire includes only 33 paragraphs, which may take only ten minutes to answer it. Please, write your perception about the actual implementation of each paragraph, which is rated from 1 to 5. Where 1 means strongly disagree and 5 means strongly agree. As the research ethic, we promise you that the answers will be used for research purposes only and they are considered confidential. Finally, we highly appreciate your contribution by answering these questions based on your real experience. Please, do not hesitate if you have any comments or questions to contact me on (0583681668).

Thank you very much.

Prepared by: Manar Yahia Younis

Supervised by: Dr. Abdel-Aziz Ahmad Sharabati

Part one: Demographic and General Information**Part one:** Demographic information

Gender: Male Female

Age (years): 18-25 26-35 Above 35

Education: Diploma Bachelor Mater Ph.D.

Experience (years): Less than 5 6-10 11-15 More than15

Department: procurement supply chain other

Part two: Questionnaire

Please circle an answer for each of the following statements based on your experience with the autopsy performance and reporting, using the scale given below (from 1 to 5): (1) indicates that you strongly disagree with the statement, (2) disagree, (3) neither agree nor disagree, (4) agree, and (5) strongly agree.

| No. | Item | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|------------------------------|--|-------------------|----------|---------|-------|----------------|
| Service Quality | | | | | | |
| Tangibility: | | | | | | |
| 1. | The company develops a presentable external appearance. | 1 | 2 | 3 | 4 | 5 |
| 2. | The company concerns with the staff's appearance. | 1 | 2 | 3 | 4 | 5 |
| 3. | The company provides parking areas. | 1 | 2 | 3 | 4 | 5 |
| 4. | The company provides electronic transactions. | 1 | 2 | 3 | 4 | 5 |
| 5. | The company develops transportation logistics. | 1 | 2 | 3 | 4 | 5 |
| Empathy: | | | | | | |
| 6. | The company gives attention to each customer. | 1 | 2 | 3 | 4 | 5 |
| 7. | The company treats customers with respect. | 1 | 2 | 3 | 4 | 5 |
| 8. | The company solves the customers' problems. | 1 | 2 | 3 | 4 | 5 |
| 9. | The company provides extra service. | 1 | 2 | 3 | 4 | 5 |
| 10. | The company offers alternative solutions to the customer. | 1 | 2 | 3 | 4 | 5 |
| Reliability | | | | | | |
| 11. | The company provides the right service to the right customer | 1 | 2 | 3 | 4 | 5 |
| 12. | The company provides accurate information. | 1 | 2 | 3 | 4 | 5 |
| 13. | The company provides services on time. | 1 | 2 | 3 | 4 | 5 |
| 14. | The company coordinates delivery changes with its customers. | 1 | 2 | 3 | 4 | 5 |
| 15. | The company offers transparent costs to the customer. | 1 | 2 | 3 | 4 | 5 |
| Assurance | | | | | | |
| 16. | The company makes you feel safe. | 1 | 2 | 3 | 4 | 5 |
| 17. | The company maintains credibility with the customer. | 1 | 2 | 3 | 4 | 5 |
| 18. | The company provides transparent prices. | 1 | 2 | 3 | 4 | 5 |
| 19. | The company maintains the invoices. | 1 | 2 | 3 | 4 | 5 |
| 20. | The company provides quantity as required. | 1 | 2 | 3 | 4 | 5 |
| Responsiveness | | | | | | |
| 21. | The company responds to customers' requests. | 1 | 2 | 3 | 4 | 5 |
| 22. | The company responds to customers at any time. | 1 | 2 | 3 | 4 | 5 |
| 23. | The company cares about customer complaints. | 1 | 2 | 3 | 4 | 5 |
| 24. | The company uses logistics careers to reduce delivery time. | 1 | 2 | 3 | 4 | 5 |
| 25. | The company provides a clear answer to customer inquiries. | 1 | 2 | 3 | 4 | 5 |
| Customer Satisfaction | | | | | | |
| 26. | The company provides standard services. | 1 | 2 | 3 | 4 | 5 |
| 27. | The company meets customer expectations. | 1 | 2 | 3 | 4 | 5 |
| 28. | The company offers feedback to customers. | 1 | 2 | 3 | 4 | 5 |
| 29. | The company provides consistent services. | 1 | 2 | 3 | 4 | 5 |
| 30. | The company conducts a customer satisfaction survey. | 1 | 2 | 3 | 4 | 5 |
| 31. | The company personalizes the services according to the customer. | 1 | 2 | 3 | 4 | 5 |
| 32. | The company provides good hospitality to customer. | 1 | 2 | 3 | 4 | 5 |
| 33. | The company respects the customers personally. | 1 | 2 | 3 | 4 | 5 |