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Dynamics of Service Quality and Students Loyalty:

Evidence from Higher Education Institutions in Oman

Prepared by:

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**Dynamics of Service Quality and Students Loyalty:
Evidence from Higher Education Institutions in Oman**

Submitted to the Faculty of Business Administration in fulfilment of the requirement for the degree of Master of Business Administration

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Dissertation Approval

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III

Declaration

I acknowledge that the source of the scientific content of this dissertation has been determined and that it is not provided for any other degree, and that it reflects the opinions of the researcher which are not necessarily adopted by the donor.

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....

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Dedication

To my lovely parents

Who have been my sources of inspiration for hard-working and who

continually provide their moral, emotional, and spiritual support

To my beloved wife

Whose affection, love, encouragement, and prayers made me able to

get such success and honour

To A' Sharqiyah university

My second magnificent home which motivated me to complete my

dissertation successfully

Abstract

Dynamics of Service Quality and Students Loyalty: Evidence from Higher Education Institutions in Oman

This study seeks to examine the relationship between service quality attributes represented by tangibility, responsiveness, reliability, empathy, and assurance and students' satisfaction and their loyalty. It aims to contribute to the quality of service in higher education institutions (HEIs) in Oman. The descriptive-analytical approach was adopted in order to achieve the study's objectives. In this study, both secondary and primary methods data were used to gather the data. The study collected the data from a total of 305 responses from five HEIs located in A'Sharqiyah North and A'Sharqiyah South Governorates in the Sultanate.

The SERVQUAL model was used to evaluate the impact of service quality characteristics on student satisfaction and loyalty in Oman's HEIs. The findings show that the dimensions of service quality are significantly and positively related to satisfaction and the students' loyalty.

In addition, the study highlights a number of practical implementations and recommendations related to the topic. To conclude, future researchers are encouraged to broaden the scope of the study by adding new variables, collecting larger samples from a wider geographic area and by covering other related stakeholders.

Keywords

ملخص الدراسة

فعالية جودة الخدمة والولاء الطلابي: نماذج من مؤسسات التعليم العالي

في عُمان

تهدف هذه الدراسة إلى فحص العلاقة بين أبعاد جودة الخدمة المتمثلة في الملموسية والموثوقية والاستجابة والتعاطف والاعتمادية من جانب ورضا الطلاب وولائهم من جانب آخر. كما ستسهم في دراسة جودة الخدمات المقدمة في مؤسسات التعليم العالي في سلطنة عمان.

تم اعتماد المنهج الوصفي التحليلي من أجل تحقيق أهداف الدراسة، كما تم استخدام كلا من البيانات الأولية والثانوية لأغراض الدراسة، وقد تم جمع عدد 305 إستبانة من خمس مؤسسات تعليمية عليا توجد في محافظتي شمال وجنوب الشرقية بسلطنة عمان.

استخدمت الدراسة نموذج جودة (SERVQUAL) لتقييم وتتبع تأثير أبعاد جودة الخدمة على رضا الطلاب وولائهم في مؤسسات التعليم العالي في عمان، حيث أشارت النتائج إلى وجود رابط ذا تأثير مهم وإيجابي يربط بين أبعاد جودة الخدمة ورضا وولاء الطلاب في مؤسسات التعليم العالي.

كما سلطت الدراسة الضوء على أهم التطبيقات العملية والتوصيات التي تم التوصل

اليها، وفي الختام توصي الدراسة الباحثين بتوسيع نطاق البحث في الدراسات المستقبلية

من خلال إضافة متغيرات جديدة مع جمع عينات أكبر للدراسة من رقعة جغرافية أوسع

وكذلك دراسة تأثير أصحاب المصلحة الاخرين.

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List of Abbreviations

HEIs	Higher Education Institutions
SPSS	Statistical Package for the Social Sciences
NoI	Number of Items
NoR	Number of Respondents
R	Correlation Coefficient
N	Number of Samples
DV	Dependent Variable
IDV	Independent Variable
Sig.	Significant
ISO	International Organization for Standardization
Min.	Minimum
Max.	Maximum
SS	Students Satisfaction
SL	Students Loyalty
G	Gender

Chapter One

Introduction

In this dissertation, the first chapter presents the background of the subject and followed by the problem statement. The chapter also presents the research questions and the research objectives. This ends by highlighting the significance of the study, operation definitions, and dissertation structure.

1.1 Background

In the last few decades, the Sultanate of Oman's educational system has undergone rapid growth. The substantial investment in education by the government has proven to be successful. In 1970, there were only three primary schools in the country, and there was no colleges or universities (Al Nabhani, 2007). The number of schools grew to 1124 schools in the academic years 2018-2019, and higher education institutions reached 69 institutions geographically spread throughout Oman. They are also classified as universities, colleges, professional colleges, the Professional College for Marine Sciences, the Oman College of Health Sciences, the Higher Institute for Specializations Health, and the Higher Judicial Institute. Among these institutions, 42 of them are government higher educational institutions and 27 are private (Council, 2020)

HEIs aim to put themselves in the educational market by implementing competitive strategies and plans. The quality of service provided is one of the key factors driving customers 'students' to become more satisfied and loyal to their institution (Hasan, Ilias, Rahman, & Razak, 2009 and Jiewanto, Laurens, & Nelloh, 2012).

To overcome these challenges, the government has encouraged the private sector to contribute by establishing universities and colleges. The government directed the private educational institutions to be affiliated with other recognized foreign universities to ensure a higher level of education provided by the institutions and to learn from affiliated institutions' experience (Harthy, 2011).

In the current environment, both public and private sectors have participated in this competition (Chui, Ahmad, Bassim, & Zaimi, 2016; Yu, Asaad, Yen, &

Gupta, 2017, and Demange, Fenge, & Uebelmesser, 2020). However, the field of education is referred to as the service-providing field since its providing educational services. Therefore, service quality dimensions are the key to sustain competitive advantages and a crucial factor in the satisfaction of students in the higher education field (Ali, Shariff, Said, & Mat, 2020). The quality of programs provided by HEIs should also be enhanced and developed in order to compete nationally and internationally by attracting more students (Sin, Antonowicz, & Wiers-Jenssen, 2019).

The Quality of Education in HEIs is mainly categorized as the quality of the academic and non-academic (Chui et al., 2016). Arostegui (2017) found that students of higher education institutions are considered as customers or clients. Onditi & Wechuli (2017) argued that students in the HEIs are considered to be a key customer. Scholars indicate that student is one of the essential stakeholders including parents, employees, sponsors, and suppliers who directly affected by institutions services quality. Satisfaction of stakeholders depends on students' satisfaction (Ahmed et al., 2010). Chen (2016) found that the best way to attract customers is to satisfy and maintain their needs by knowing the preferences and perceptions of service quality by the service providers.

Despite recent research on service quality dimensions, little work has been concentrated on service quality in HEIs specifically in Oman. Various models of service quality dimensions are found in the literature such as Parasuraman, Zeithaml, & Berry (1985, 1989), Haywood Farmer (1988), and Stewart and Walsh (1989) (Owlia & Aspinwall, 1998).

This dissertation aims to examine the relevance between service quality characteristics and both the students' satisfaction and loyalty in HEIs through implementing the SERVQUAL model developed by Parasuraman, Zeithaml, & Berry (1988).

1.2 Problem Statement

Understanding customers' needs is a critical factor in achieving a competitive advantage (Demange et al., 2020). Furthermore, the competition has emphasized the vital role of customer satisfaction and quality provided in attracting

customers and creating sustainable competitive advantage (Petruzzellis, D'Uggento, & Romanazzi, 2006). HEI's are trying to be aware of students' expectations and perceptions by addressing their responses to achieve competitive advantages (Saleem, Moosa, Imam, & Ahmed Khan, 2017). In Oman, service quality can significantly impact HEIs' daily activities which in turn grant the Sultanate competitive advantages in the educational field locally and internationally.

To the best of the researcher's knowledge, this research is the first study to test the relationship between the attributes of service quality and the loyalty of students mediated by the satisfaction of students at HEIs in Oman.

To research the relationship between the service quality characteristic with the satisfaction and loyalty of students in HEIs of Oman, the study's research questions and objectives were formulated to examine the relationship between the quality of service and the satisfaction and loyalty of students.

Various tools are recommended for measuring the service quality dimensions (Owlia & Aspinwall, 1996 and Kang & James, 2002). The SERVQUAL model is one of the realistic service quality assessment methods suggested to be used to examine the attribute of service quality in institutions (Parasuraman et al., 1988). Kang & James (2002) also recommended using the SERVQUAL instrument with the five dimensions; tangibles, reliability, empathy, assurance, and responsiveness to measure the service quality dimensions.

In order to examine the service quality dimensions in HEIs of Oman, this study adopted the SERVQUAL model of Parasuraman to examine the relationships with the satisfaction and loyalty of students.

1.3 Research Questions

In view of the foregoing, four main research questions and five sub research questions were raised as follow:

RQ1: What is the relationship between service quality dimensions and students' satisfaction in HEIs in Oman?

> **RQ1.a:** What is the relationship between tangibility in service quality and students' satisfaction in HEIs in Oman?

> **RQ1.b:** What is the relationship between responsiveness in service quality and students' satisfaction in HEIs in Oman?

> **RQ1.c:** What is the relationship between reliability in service quality and students' satisfaction in HEIs in Oman?

> **RQ1.d:** What is the relationship between assurance in service quality and students' satisfaction in HEIs in Oman?

> **RQ1.e:** What is the relationship between empathy in service quality and students' satisfaction in HEIs in Oman?

RQ2: What is the relationship between service quality dimensions and students' loyalty in HEIs in Oman?

RQ3: What is the relationship between students' satisfaction and students' loyalty in HEIs in Oman?

RQ4: What role does gender in the relationship between students' satisfaction and students' loyalty in HEIs in Oman?

1.4 Research Objectives

In the light of the foregoing mentioned from research questions. This study aims to achieve the below objectives:

RO1: To examine the relationship between service quality dimensions and students' satisfaction in HEIs in Oman

> **RO1.a:** To examine the relationship between tangibility in service quality and students' satisfaction in HEIs in Oman

> **RO1.b**: To examine the relationship between responsiveness in service quality and students' satisfaction in HEIs in Oman

> **RO1.c:** To examine the relationship between reliability in service quality and students' satisfaction in HEIs in Oman

> **RO1.d:** To examine the relationship between assurance in service quality and students' satisfaction in HEIs in Oman

> **RO1.e:** To examine the relationship between empathy in service quality and students' satisfaction in HEIs in Oman

RO2: To examine the relationship between service quality dimensions and students' loyalty in HEIs in Oman

RO3: To examine the relationship between students' satisfaction and students' loyalty in HEIs in Oman

RO4: To examine the role of gender in the relationship between students' satisfaction and students' loyalty in HEIs in Oman

1.5 Significant of the Study

Quality of service is one of the main factors that drive customers to become more satisfied and loyal to their institutions (Jiewanto, Laurens, & Nelloh, 2012). Consequently, this study aims to examine the level of service quality in HEI's in Oman, which is expected to impact on students' satisfaction and loyalty. Collecting Samples from universities and colleges is only limited to the Governorate of Ash Sharqiyah (South & North) of Oman.

The significance of this study lies in demonstrating the impact of service quality on the satisfaction of students and loyalty, which would reflect positively on the institution. This study also highlights the role of service quality in formulating and developing policies and strategies of the institution, which gives the institution a competitive advantage in the competitive education field (Asaa et al. 2017).

Also, the results of this study are to assist HEIs on how to use service quality practices to revitalize the engagement of services in the presence of increasing competition. The satisfaction of HEIs services could be a way to contribute to the overall institution service experience (Twum, Adams, Budu, & Budu, 2020).

This study enhances understanding of the impact of service quality on students' satisfaction and loyalty at HEIs in Oman by studying service quality attributes' effects on the educational field. Also, it encourages researchers to focus more on this topic due to lack of studies on the service quality in HEIs in Oman.

1.6 Operation Definitions

As stated by Parasuraman et al. (1988), service quality refers to the gap founded among the customers' expectations and perceptions of the services provided after utilizing them. Accordingly, this research explains the quality of service as the gap between expectations of students of service provided by their HEI and their perceptions of them.

Tangibles are explained by Parasuraman et al. (1988) and Alhkami & Alarussi (2016) as the appearance of physical factors like buildings, equipment, materials

used as the appearance of services. According to that, this research refers to tangibility as the physical appearance of the HEI, visually appealing environment, materials, equipment, as well as the institution's employees.

Parasuraman et al. (1988) and Tjiptono (2012) define reliability as the degree of providing the services accurately and dependably. Accordingly, reliability is described here as the institution's ability to provide the promised services to its students dependably and accurately.

Responsiveness is defined by Parasuraman et al. (1988) and Tjiptono (2012) as the willingness of a company to provide quality, excellent, and fast services to customers. Correspondingly, this research refers to responsiveness as the readiness of the HEI to assist students by providing excellent and fast services.

Parasuraman et al. (1988), and Alhkami & Alarussi (2016) define assurance as the ability of employees to inspire confidence and trust in customers through the services offered. Base on this, the research defines assurance as the institution's capacity to inspire confidence and trust of students through the services provided.

Parasuraman et al. (1988) and Lassar, Manolis, & Winsor (2000) found that empathy relates to the caring and individual consideration that an organization provides to customers. According, this study described empathy as the degree of looking after and individualized attention given by the institution to its students.

Oliver (1980) refers to satisfaction of customers as a psychological condition; the emotions about unconfirmed expectations and prior feelings of consumers about consumption experience. Accordingly, this research refers to students' satisfaction as a measure of how the institution could provide services that meet and exceed students' service expectations.

Auka (2012) describes loyalty as a client's deep commitment to regularly reuse or re-buy the favored product or service in the future. According to that, this research explains loyalty of students as a deeply held commitment by students toward the institution who believed that the institution's products and services offer the best.

1.7 Dissertation structures

The below chart illustrates the structure of this dissertation.

Chapter 1 Introduction	• This chapter presents the background of the selected topic and follows by the problem statement. In addition to that, it addresses the questions and objectives of the research. This section concludes by highlighting the significance of the research and the operational definitions.
Chapter 2 Literature Review	• This section shows the literature related to the research. In addition, it also establishes the conceptual framework and highlights the hypotheses of the research.
Chapter 3 Methodology	• The applied methodology of research is described in this part. In addition, it also includes research design, strategy, framework, and a brief description of the study's data collection and samples. This chapter also presents the questionnaire design and it ends by introducing the aspects of validity and reliability.
Chapter 4 Data Analysis and Findings	• This chapter displays the results of the data collection and analytical methods implemented. In the beginning, the descriptive analysis of both personal demographics and the study's variables is described. It then checks the normality and reliability of the study samples. The next section tests the hypotheses and draws conclusions. Finally, the chapter presents the study's theoretical framework.
Chapter 5 Conclusions and Recommendations	• This section discusses the findings of this thesis and draws conclusions. It follows by given recommendations for decision-makers and implementations. This chapter ends by showings the limitations of this dissertation and the guidelines for future studies.

Figure 1.1 Dissertation Structures

Chapter Two
Literature Review

This chapter reviews the literature on service quality and students' satisfaction and loyalty. This is followed by discusses the associations between independent, mediating, moderating, and dependent variables. This chapter ends by presenting the conceptual framework for this study and its hypotheses.

2.1 Service Quality

To date, every HEI faces a common challenge of identifying the exact approach of providing excellent tertiary level education services to satisfy the expectations and perceptions of students. Therefore, HEIs are keen to provide excellent quality services to succeed and sustain within the education industry. Thus, understanding how the students look for the quality of service is essential to cater to them in an appropriate manner (Ali et al., 2020).

Service quality is defined as the gap between consumers' expectations for the provided services and their perceptions of the services after the experience (Parasuramanet et al., 1988). The relationship between the quality of perceived services and the students' behavioral intentions have been studied by Twaissi & Al-Kilani (2015). The service providers should concentrate on the service quality dimensions in order to maintain the loyalty of their quality seeking customers. (Abdelfattah, Rahman, & Osman, 2015). Their results showed that the perceived dimensions of reliability, assurance, and tangibility had an impact on students' intentions that could help to advise others about their universities. Jiewanto, Laurens, & Nelloh (2012), Saleem et al. (2017), and Cahyono et al. (2020) provided insights about the effects of quality of service in the HEIs on the students' satisfaction and loyalty and its positive contribution as a source of marketing and competitive advantage. They also noted that there is a positive effect on students' satisfaction through service quality. In addition, several studies have examined the five key components of service quality using Parasuraman's SERVQUAL model and their effect on customer satisfaction (Jiewanto et al. 2012).

2.1.1 Tangibility

The tangibility is defined as the appearance of physical equipment, resources, employees, and other related material as explained by Parasuraman et al. (1988). Also, tangibility reflects the physical resources, employees' presence, and communication materials that were used to serve the customers and any physical environment quality in the institution (Hasan et al., 2009). Moreover, Hasan et al. (2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017) point out that tangibility has a positive effect on students' satisfaction.

2.1.2 Reliability

Reliability, as shown by Parasuraman et al. (1988), refers to the capacity to execute the promised service in an efficient and precise manner. Even, the reliability of an institution means the organization's ability to achieve its promises regarding service provision, delivery, and problem rectification. A significant positive relationship was identified by Hasan et al. (2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017) between reliability and students' satisfaction on HEIs.

2.1.3 Responsiveness

Responsiveness is described by Parasuraman et al. (1988) as the willingness to assist clients and offer a prompt service. In other terms, that is, responsiveness emphasizes the attention and promptness in interacting with students' clarifications, requests, problems, and complaints. A significant positive relationship was found between the responsiveness and the satisfaction of students in HEIs by Hasan et al. (2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017).

2.1.4 Assurance

Assurance, as illustrated by Parasuraman et al. (1988) relates to employees' awareness, courtesy, and their ability to deliver faith and trust. In other words, the willingness, understanding, courtesy, and capacity which are undertaken by all institutions' employees to display trust and confidence to students are referred to as assurance. Hasan et al. (2009), Sumaedi, Bakti, & Metasari (2011) and Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017) found that assurance

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related positively with students' satisfaction. Also, assurance is considered as one of the two most critical characteristics of service quality that is associated with student satisfaction by Hasan et al. (2009).

2.1.5 Empathy

Empathy is referred to as the attention and care provided to individual customers (Parasuraman et al., 1988). Empathy reflects the extent of care given to customers in terms of feelings and understanding between each party (Kundi et al., 2014). Moreover, Hasan et al.,(2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017) had found that empathy tends to have a significant positive effect on satisfaction and loyalty of customers. They also demonstrated that the empathy variable of service quality is the most critical aspect of students' satisfaction.

2.2 Student's Satisfaction

Globalized Competition has emphasized the vital role of strategies of customer satisfaction and quality in attracting customers and creating sustainable competitive advantage (Petruzzellis et al., 2006). In the higher education sector, service quality dimensions are one of the essential factors for students' satisfaction, which leads to sustainable competitive advantage (Ali et al., 2020). While many other studies try to explain students' satisfaction, one of the key challenges faced by the researchers was their inability to form a common definition for student satisfaction. This drives the researchers to select and modify a customer satisfaction theory to illustrate the significance of student satisfaction (Hom, 2002). It is identified that working with a student, as a customer, is risky, but there is new ethical excellence that makes a student as a customer and requested to listen to their reasonable demand since the nature of marketing in current higher education institutions which considered a student as fee payer (Hom, 2002). For this reason, in educational institutions, the student is one of the essential stakeholders.

Additionally, satisfied students are the source of active marketing and competitive advantage for the institution (Ahmed et al., 2010). The satisfaction of the customer

has been defined as the customers' experience with the service that meets the set expectations (Oliver, 1980).

Hassan, Jaafar, Firdaus, & Shamsudin (2020) observed that students' satisfaction has a direct relationship with the students' loyalty. This dissertation seeks to evaluate the satisfaction of students based on the service quality provided in HEIs in Oman by taking samples from education institutions of Ash Sharqiyah North and Ash Sharqiyah South Governorates.

2.3 Student's Loyalty

Various studies consider customer loyalty as a critical factor. Student loyalty is pivotal in the competitive market of higher education (Hassan et al., 2020). Many researchers had deeply studied loyalty and had explained the factors that led customers to stay loyal to the organization. Auka (2012) defined loyalty as a deep commitment of the customer to re-buy or reuse preferred services or products in the future on a consistent basis. Also, loyalty is defined as the degree to which a customer purchases repeatedly from the same provider with a positive attitude. The loyalty of customers plays a role in the creation and maintenance of competitive advantage. The primary customer of higher education institutions is the students, so students' loyalty is becoming increasingly crucial for HEIs (Helgesen & Nesset, 2007a)

2.4 The Relationship among Study Variables

2.4.1 Service Quality and Students Satisfaction

Service quality is a vital condition to satisfy a customer and sustain the relationship (Hasan et al., 2009). Also, Arambewela & Hall (2006) and Krishna Naik, Gantasala, & Prabhakar (2010) found that the quality of service is proceeding to overall students' satisfaction. Chandra, Ng, Chandra, & Priyono (2018) indicated that the service quality has a positive impact on the students' satisfaction which means that any improvement in service quality would eventually increase the students' satisfaction. Also, Hasan et al. (2009) and Twum et al. (2020) pointed out that service quality attributes relate to student satisfaction in a positive way, from more significant to lower impacts in the following order; empathy, which is accompanied

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by assurance, followed by tangibility, then backed up by responsiveness and reliability. The study concluded that empathy and assurance are the most two critical dimensions of service quality that impact the satisfaction of students. Chandra et al. (2018) and Ali et al. (2020) showed that service quality factors have a positive relationship with the students' satisfaction. Similar findings were found with Osman & Ashraf (2019) identified that students' satisfaction related significantly and positively with education services quality.

2.4.2 Service Quality and Students Loyalty

Student loyalty is critical in the competitive higher education market (Hassan et al., 2020). Also, Hassan et al. (2020) and Cahyono et al. (2020) disclosed that the quality of service has a direct connection with the loyalty of the students. Conversely, according to Chandra et al. (2018), the quality of service does not have a significant impact on student loyalty.

Also, other researchers like Kundi et al. (2014) and Auka (2012) proved that the service quality has a positive direct relationship with students' loyalty. More precisely, Mwiya et al. (2017) and Cahyono et al. (2020) found that each dimension of the service quality has a significant positive relationship to student satisfaction, which is associated with the loyalty of students.

2.4.3 Students Satisfactions and Students Loyalty

Literature studied the relationship between students' satisfaction and students' loyalty. Cahyono et al. (2020) found that students' satisfaction has a significant effect on students' loyalty and students' loyalty can also be increased by increasing students' satisfaction. Also, Twum et al. (2020) revolved that a positive significant relationship between user satisfaction and user loyalty.

2.4.4 Service Quality with Students Satisfaction and Loyalty

Prior literature studied service quality and its relation with students' satisfaction and loyalty. Chandra et al. (2018) observed that a quality service would have a positive impact on the students' satisfaction, but on the contrary, it has been identified that the service quality does not affect the students' loyalty. In addition, the provision of

service quality by Auka (2012) and Mwiya et al. (2017) have shown a direct positive relationship with customer satisfaction and loyalty. Also, other studies like Kundi et al. (2014) said that the relationship between service quality dimensions and customers' satisfaction and loyalty are significantly positive. Furthermore, Hassan et al. (2020) revealed that student loyalty is impacted by service quality and student satisfaction.

The below table summarizes the relationship between study variables based on the above-reviewed literature:

Table 2.1 Relationship between Studied Variables in the Literature

Studied Relationship	Main Findings	Authors
Service quality with students' satisfaction	Service Quality has a significant positive impact on the students' satisfaction	Hasan et al. (2009), Chandra et al. (2018), Osman & Ashraf (2019), Ali et al. (2020), and Twum et al. (2020)
Tangibility with students' satisfaction	Tangibility has a significant positive impact on the students' satisfaction	Hasan et al. (2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017)
Reliability with students' satisfaction	Reliability has a significant positive impact on the students' satisfaction	Hasan et al. (2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017)
Responsiveness with students' satisfaction	Responsiveness has a significant positive impact on the students' satisfaction	Hasan et al. (2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017).
Assurance with students' satisfaction	Assurance has a significant positive impact on the students' satisfaction	Hasan et al. (2009), Sumaedi et al. (2011), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017)
Empathy with	Empathy has a significant	Hasan et al. (2009), Jiewanto et al.

students' satisfaction	positive impact on the students' satisfaction	(2012), Mwiya et al. (2017), and Saleem et al. (2017)
Service Quality with students' Loyalty	Service quality has a significant positive impact on the students' Loyalty	Kundi et al. (2014) and Auka (2012), Mwiya et al. (2017), Hassan et al. (2020), Cahyono et al. (2020)
	Service quality has no impact on the students' Loyalty	Chandra et al. (2018)
Students' satisfaction with Students' loyalty	Students' satisfaction has a significant positive impact on the students' Loyalty	Cahyono et al. (2020) and Twum et al. (2020)

2.5 Conceptual Framework

Based upon the literature discussed above, this study implements the model of SERVQUAL evolved by Parasuraman et al. (1988) to examine the relationship between the characteristics of service quality, the satisfaction of students, and loyalty of students in Oman's HEIs.

The conceptual framework adopted by this dissertation consists of the independent variables which attributes up to the overall service quality and its five characteristics namely: tangibility, assurance, reliability, empathy, and responsiveness. Also, the conceptual framework includes students' satisfaction as a mediating variable, gender as a moderating variable, and students' loyalty as a dependent variable as shown in figure 2.1.   .
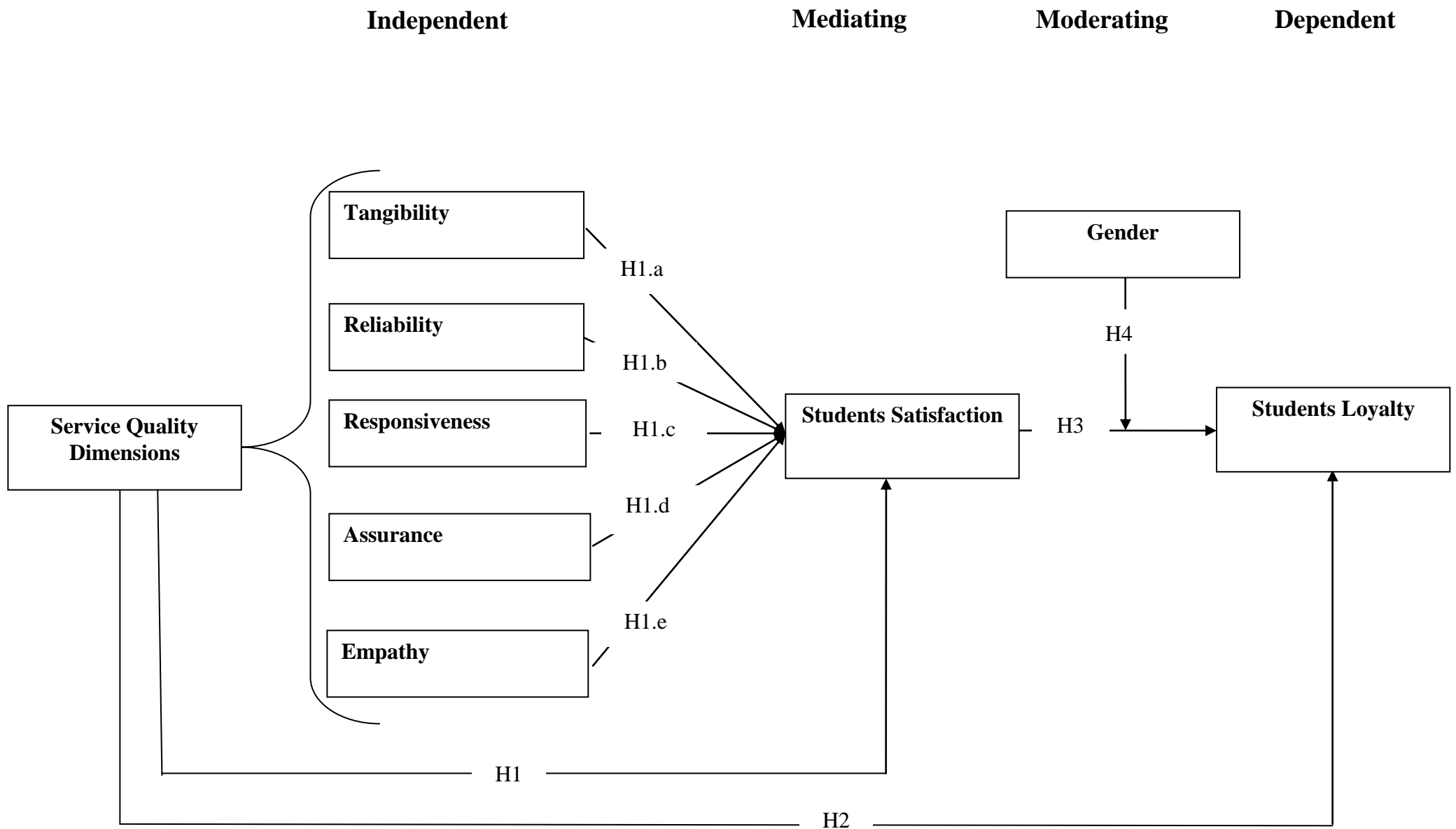
Figure 2.1 Conceptual Framework of Study

2.6 Research Hypotheses

Centered on the above suggested conceptual framework, this research has the following hypotheses:

H 1: There is a significant positive relationship between service quality dimensions and students' satisfaction

> **H 1.a:** There is a significant positive relationship between tangibility in service quality and students' satisfaction
>
> **H 1.b:** There is a significant positive relationship between reliability in service quality and students' satisfaction
>
> **H 1.c:** There is a significant positive relationship between responsiveness in service quality and students' satisfaction
>
> **H 1.d:** There is a significant positive relationship between assurance in service quality and students' satisfaction
>
> **H 1.e:** There is a significant positive relationship between empathy in service quality and students' satisfaction

H 2: There is a significant positive relationship between service quality dimensions and students' loyalty

H 3: There is a significant positive relationship between students' satisfaction and students' loyalty

H4: Gender moderates the relationship between students' satisfaction and students' loyalty

Chapter Three
Methodology

Chapter three explains the implemented methodology in this research. This chapter includes research design, research strategy, research framework, data collection, study population and sample, and questioner design. Finally, the validity and reliability subject is covered at the end.

3.1 Research Design

The design of the research is important because it serves as a research framework that provides appropriate answers to research questions. The research design discusses research strategies, research choices, and time horizons. In other words, it turns the research questions and objectives into a research project (Saunders et al., 2009).

The research design was illustrated by Saunders et al. (2009) as a framework of research methods and techniques chosen by a researcher. The research philosophy is influenced by the followed method to answer the research questions. Also, answering the research questions method determines the research strategy, type of samples, data collection methods, measuring variables methods, analysis way of variables, and a time horizon required for the project.

This dissertation aims to define the relationship between quality of service characteristics, the satisfaction, and the loyalty of students in HEIs. The research strategy, study population and sample, data collection, measures of study variables, and other activities of the research are discussed in the following sections.

3.2 Research Strategy

The research strategies are chosen based on the research questions. The research strategy also is driven by research goals, present information, time zone, and resources available. Moreover, the research strategy could be used for any kind of research exploratory, descriptive, and explanatory. According to that, it could belong to the deductive approach or inductive approach (Saunders et al., 2009).

Also, Saunders et al. (2009) said the research strategy has different types, such as case study, action research, an experiment, survey, archival research, ethnography, or grounded theory research. Moreover, the study could have more than one strategic type, like a case study strategy and survey strategy.

The research has two major types, either basic research or applied research. This study is basic research since it aims to generate and expand a set of knowledge that can help society & the whole country (Saunders et al., 2009). In other words, this dissertation seeks to enhance the understanding of service quality in HEIs in Oman and its effect on students' satisfaction and loyalty.

According to Saunders, et, al (2009), there are two key analysis approaches in the research, either inductive or deductive. This study follows the deductive approach since this dissertation developed existing theory and hypotheses as well the research strategy designed to test the hypothesis (Saunders, et al., 2009).

The researches have various approaches such as positivist, interpretive, or mixed-method (Saunders et al., 2009). This dissertation follows the positivist assumption since it follows quantitative methods and tests the hypothesis.

The research strategy could be used for any kind of research exploratory, descriptive, and explanatory. Accordingly, it could belong to the deductive approach or inductive approach. The descriptive study seeks to describe the characteristics of the population or phenomena (Saunders et al., 2009).

This study follows a descriptive approach since it seeks to describe characteristics of the study population which are students in HEIs in Oman and study their satisfaction and loyalty to their institutions about service quality provided to them.

The researchers use either the quantitative method, qualitative method, or the two methods together depend on the requirements of the study. This research used a quantitative method through distribution questioners to students of HEIs which are located in the Governorates of North and South Ash Sharqiyah of Oman (A'Sharqiyah University, Ibra College of Technology, Sur University College, College of Applied Sciences-Sur; and Oman College of Health Science-North Sharqiyah   Branch).

3.3 Study Population and Sample

There are two sampling approaches here: probability and non-probability. A Sampling of probability requires the random collection of elements where each element is likely to be selected. On the other hand, in the collection of elements, non-probability sampling requires non-random approaches where not all of them have equal opportunities of being picked. The non-probability sampling design has various types, such as convenience sampling, quota sampling, and judgment sampling (Uma Sekaran, 2016). This study has applied a method of sampling non-probability with convenience sampling type since it selects samples based on most easily accessible members are chosen as subjects. This dissertation applied the cross-sectional study type since the study's sample has taken as a snapshot of a single point in time.

This study has collected 305 responses from students of targeted HEIs, which are A'Sharqiyah University, Ibra College of Technology, Sur University College, College of Applied Sciences-Sur; and Oman College of Health Science-North Sharqiyah Branch.

3.4 Data Collection

The broad approaches of gathering information data for the research are classified as primary and secondary data. Secondary sources such as books, papers, statistics, archives related to the study are used to gather the secondary data. Moreover, the primary data could be collected by using interviews, observation, administering questionnaires, or experiments (Uma Sekaran, 2016)

Accordingly, this dissertation has used two methods of collecting data; the secondary data through using books and literature as well as the primary data through distributing questionnaires. By using the primary data method, the questionnaire was distributed through an online survey tool to students of five HEIs located in both North and South of Ash Sharqiyah Governorates (A'Sharqiyah University, Ibra College of Technology, Sur University College, College of Applied Sciences-Sur; and Oman College of Health Science-North Sharqiyah Branch). The respondents' samples were composed of 305 students.

3.5 Questionnaire Procedures and Design

The questionnaire of this study passed through the following steps:

Firstly, the questionnaire has distributed to thirteen academic and non-academic employees for arbitration purposes of insuring from the validity of this questionnaire, and based on the received comments from the reviewers; the questionnaire has been adapted.

Secondly, the adapted questionnaire has been distributed as a pilot study for about twenty-one students from various HEIs are located in the Governorates of Ash Sharqiyah, North and South, to test the validity and reliability of the questionnaire.

Thirdly, after reviewing the received comments and testing the reliability of distributed samples; the questionnaire has been agreed to generalize and distribute to the population sample.

Finally, the questionnaire has been distributed to students in five HEIs which are located in Governorates of Ash Sharqiyah South and Ash Sharqiyah North in Oman (A'Sharqiyah University, Ibra College of Technology, Sur University College, College of Applied Sciences-Sur; and Oman College of Health Science-North Sharqiyah Branch).

3.6 Variables Measurement

The theoretical framework of this research consists of six independent variables which are the overall quality of service and its attributes, namely tangibles, empathy, assurance, responsiveness, and reliability. Furthermore, this study has a dependent variable which is student loyalty. Also, the theoretical framework uses student satisfaction as a moderating variable and gender as a mediating variable.

The measurement of variables and constructs of this research has been carried out based on statements and measurements from previous literature with adaptations of the researcher based on the existing environment.

Business researches use different kinds of rating scales. Likert Scale is one of the rating scales commonly used to measure attitudes and opinions. This measures the respondent's degree to which agree or disagree with a given statement, normally

ranging from strong disagreement to strong agreement on a five-point scale (Uma Sekaran, 2016).

A five-point Likert Scale starting with (1) strongly disagree, and ending with, (5) strongly agree was applied to measure the study variables.

A total of 305 responses have been collected from students of HEIs in Oman (A 'Sharqiyah University, Ibra College of Technology, Sur University College, College of Applied Sciences-Sur; and Oman College of Health Science-North Sharqiyah Branch).

3.6.1   Service Quality

Quality of service is described as the gap between expectations of the customer for the offered services and perceptions of the services after the experience (Parasuraman et al., 1985). In other words, the quality of service in this dissertation is defined as the gap between the students' perception of the university's offered services before and after using services.

Service quality in this study is a dependent variable. It has been measured by twenty items that have been adopted from Owlia & Aspinwall (1998), Chui, Ahmad, Bassim, & Zaimi (2016), and Mwiya, Siachinji, Sikombe, Chanda, & Chaw (2017). And to assess this variable, a five-point Likert Scale has been applied.

3.6.1.1   Tangibility

Tangibility is defined as the representation of physical variables like equipment, buildings, materials used to the appearance of services (Parasuraman et al., 1988 and Alhkami & Alarussi, 2016). Furthermore, this research refers to tangibility as the physical appearance of the university, visually appealing environment, equipment, materials, and appearance of university employees.

Tangibility variable in this study is a dependent variable. It has been measured by four items that have been adopted from Owlia & Aspinwall (1998) and Mwiya et al. 2017). Finally, a five-point Likert Scale has been adapted to measure the tangibility variable.

Table 3.1 Measures of Tangibility Variable

Variables	Adapted
Tangibility	1. My institution has physical facilities (e.g. buildings and furniture) that are attractive and stylish
	2. My institution has sufficiency of academic equipment, e.g. laboratories, workshops
	3. My institution has up to date equipment
	4. My institution has ease of access to the database, e.g. books, journals, software, information networks

3.6.1.2　Reliability

Reliability refers to the degree of providing the services accurately and dependably (Parasuraman et al., 1988 and Tjiptono, 2012). Furthermore, this study describes reliability as the university's capacity to dependably and accurately provide its students with the promised services.

Reliability in this study is a dependent variable. It has been measured by four items that have been adopted from Chui et al. (2016) and Mwiya et al. (2017). In the end, for the calculation of the reliability attribute, a five-point Likert Scale was applied.

Table 3.2 Measures of Reliability Variable

Variables	Adapted
Reliability	1. My institution provides services as promised
	2. When the students have problems, the employees of my institution are sympathetic and reassuring
	3. My institution provides the service correctly the first time
	4. My institution documents its records accurately (e.g. students' results)

3.6.1.3 Responsiveness

Responsiveness is defined as the willingness of a company that assists its customers by providing quality, excellent and fast services (Parasuramanet al., 1988 and Tjiptono, 2012). Also, this research refers to responsiveness as the university's ability to assist its students by providing them with outstanding and swift services.

Responsiveness in this study is a dependent variable. It has been measured by four items that have been adopted from Chui et al. (2016), and Mwiya et al. (2017). Also, a five-point Likert Scale was used for the responsiveness variable measurement.

Table 3.3 Measures of Responsiveness Variable

Variables	Adapted
Responsiveness	1. My institution informs students exactly when services will be performed
	2. My institution gives prompt service to students
	3. Employees at my institution are willing to help students
	4. Employees at my institution are ready to respond to student's request

3.6.1.4 Assurance

Assurance relates to the capacity of workers to express faith and confidence to customers through delivered service (Parasuraman et al., 1988 and Alhkami & Alarussi, 2016). Furthermore, this research defined assurance as the university's ability to inspire confidence in students through the services provided by the knowledge and courtesy of its employees.

Assurance in this study is a dependent variable. It has been measured by four items that have been adopted from Chui et al. (2016), and Mwiya et al. (2017). For the assurance factor calculation, a five-point Likert Scale was also utilized.

Table 3.4 Measures of Assurance Variable

Variables	Adapted
Assurance	1. Employees of my institution can be trusted
	2. Students feel safe when dealing with the institution's employees
	3. Employees at my institution inspire confidence
	4. Employees of my institution are polite

3.6.1.5   Empathy

Empathy relates to the caring and individual concern that an institution gives to its clients (Parasuramanet al. 1988 and Lassar, Manolis, & Winsor, 2000). Furthermore, this research stated empathy as the degree of looking after and individual concern given to its students by the university.

Empathy in this study is a dependent variable. It has been measured by four items that have been adopted from Chui et al. (2016) and Mwiya et al. (2017). For the empathy variable assessment, a five-point Likert Scale was also applied.

Table 3.5 Measures of Empathy Variable

Variables	Adapted
Empathy	1. Lecturers give students individual attention
	2. My institution's employees know students' needs
	3. My institution's employees are easily accessible to students
	4. My institution has students' best interests at heart

3.6.2   Students Satisfaction

Customer satisfaction is a psychological state, where the emotions around disconfirmed expectation and consumers' prior feelings about consumption experience are mixed (Oliver, 1980). Furthermore, this research refers to student satisfaction as a measure of how the university could provide services that meet and exceed student service expectations

Student satisfaction in this study is a mediating variable. It has been measured by four items that have been adopted from Gordon & McDougall (2000), Rojas, Vasquez, Kara, & Cerda (2009), Annamdevula & Bellamkonda (2016), (Chen, 2016), and Chandra & Priyono (2018). To measure the student satisfaction variable, a five-point Likert Scale was implemented.

Table 3.6 Measures of Student satisfaction Variable

Variables	Adapted
Student Satisfaction	1. I am satisfied with the overall quality of services being provided by my institution
	2. I am satisfied with the decision to study in my institution
	3. My institution meets my expectations
	4. I am extremely satisfied with my institution

3.6.3   Students Loyalty

Loyalty is the deep engagement of a consumer to continuously reuse or re-buy a favorite product or service in the future (Auka, 2012). Furthermore, this research explains student loyalty as a firmly held commitment of students toward the university who believed that the university's products and services offer the best option.

Student Loyalty in this study is an independent variable. It has been measured by four items that have been adopted from Helgedsen & Nesset (2007), Rojas et al. (2009), Annamdevula & Bellamkonda (2016), and Chandra et al. (2018).   To measure the student loyalty variables, a five-point Likert Scale was carried out.

Table 3.7 Measures of Student Loyalty Variable

Variables	Adapted
Student Loyalty	1. I am feeling proud to be associated with my institution
	2. I'd recommend my institution to friends and family members
	3. I will write a positive impression of my institution in social media
	4. I prefer to pursue my higher studies in the same institution

3.7 Questionnaire Design

The researcher has to design a questionnaire in the right way to minimize bias in research. The principles of questionnaire design have to focus on three main phases.

The first phase is related to the wording of the questions. And the second phase is related to the principles of measurement and planning of research issues concerning with variables categorized, scaled, and coded. Finally, the third part refers to the general presentation of the questionnaire. (Uma Sekaran, 2016).

The questionnaire of this dissertation has been designed with considers of the principles of wording through providing a suitable content of questions and focusing on the words, types, forms, and sequencing of the questions. Moreover, the designed questionnaire of this study also has considered the principles of measurement to be followed to ensure that the data collected are suitable to test the research's hypotheses, as well as to check the validity and reliability of the methods used. Finally, the questionnaire of this study has been designed to consider the organization of the entire questionnaire through the general appearance and organizing questions.

The designed questionnaire of this research consists mainly of four sections. The first section is an introduction that started by thanking the respondents for replying to the survey as well as showed the identity of the researcher and

conveyed the purpose of this survey. Also, the introduction part of this research included motivation for participants to answer the questions found in the questionnaire enthusiastically and declaring assurance of confidentiality of the information provided by respondents which minimize the biased answers.

The second section investigates respondents' demographic data like age, gender, the institutions of education, and level of education.

The third section measures attributes of service quality; empathy, tangibles, assurance, responsiveness, reliability, and tangibles. Four items were used to measure each dimension of service quality, with a total of twenty items.

The fourth section measures the mediating variable, which is students' satisfaction by using four items. The Fourth section measures the dependent variable, which is students' loyalty through four items.

In the end, the questionnaire has ended with an open-ended elective question to allow respondents to comment on any aspect they choose, and the questionnaire was concluded by researcher contact number and thank word. The questionnaire has been attached in the appendix.

3.8 Questionnaire Procedure

The questionnaire of this study passes through the following steps:

1. The questionnaire questions were collected from different reliable sources, ex. Published literature.
2. The researcher reviewed and adapted the questionnaire questions based on the existing condition and sample population.
3. The supervisor reviewed and commented on the designed questionnaire.
4. The modified questionnaire was handed to thirteen academic and non-academic employees of A'Sharqiyah University for arbitration purposes of insuring from the validity of this questionnaire.
5. The questionnaire was adapted based on the comments received from the arbitrators.
6. The modified questionnaire was distributed to a pilot sample of twenty-one students to examine its validity and reliability.

7. The pilot sample clarified that all questions were clear and ready for distribution.

8. The questionnaire was popularized and spread to the population sample after validity and reliability checking.

9. The questionnaire was generalized to the population sample within a short period to ensure the availability of the same conditions for all respondents, and there are no changes because of changes on time.

10. 305 responses were collected for study analysis purposes.

3.9 Validity and Reliability

For the purpose to minimize the probability of uncorrected responses, attention needs to give to the validity and reliability of the study data(Saunders, Lewis, Thornhill, 2009).

3.9.1 Pilot Study

The pilot study for the developed questionnaire was performed to check the reliability and validity of the questionnaire among a random sample of twenty-one respondents from the study population. The pilot study provides valuable feedback from responses to revise and improve the questionnaire by testing the wordings of questions and identifying ambiguous and unclear questions before distributed to the whole study population.

3.9.2 Validity

Validity relates to the question of whether the results are actually about what they look to be about, according to Saunders et al. (2009). Also, validity is defined as the degree whereby the conduct of the researcher is correctly documented by observations (Uma Sekaran, 2016).

Several steps were taken in this research to test the validity of the study, which is shown clearly in the questionnaire design and procedures. For example, questionnaire items were collected from previous literature and adapted based on existing conditions. Also, revise the validity of the questionnaire by the supervisor and other specialists for arbitration purposes and adapted based on received comments. Next, a pilot study has been implemented to ensure the validity of the questionnaire. Finally, generalized and distribute the questionnaire

within a short period to ensure all responders are answering with the same conditions.

3.9.3 Reliability

Reliability is the degree to which the process or method of data collection can generate consistent results, similar conclusions or observations drawn by other researchers, or the significance of the raw data has been made transparent (Saunders et al., 2009). As well (Uma Sekaran, 2016) refers to reliability as the consistency of observations. An instrument's validity is the consistency's degree that calculates the attribute to be calculated. The main aim of the reliability test is to emphasize the internal consistency of each item of the variables. This study has used Cronbach's alpha to assess each variable's reliability (tangibles, empathy, assurance, responsiveness, reliability, student satisfaction, and student loyalty). The following tables shows Cronbach's alpha of variables:

Table 3.8 Cronbach's alpha of Pilot Study

Variables	Number of Items (NoI)	Number of Respondents (NoR)	Cronbach's Alpha
Tangibility	4	21	0.846
Empathy	4	21	0.728
Assurance	4	21	0.847
Responsiveness	4	21	0.849
Reliability	4	21	0.807
Student Satisfaction	4	21	0.807
Student Loyalty	4	21	0.869

Tangibles variable was measured with four items and a sample population of 21 respondents. The reliability analysis shows that Cronbach's alpha of Tangibles variable = 0.846 Number of Items (NoI) =4 and Number of Respondents (NoR) =21, which indicates a high level of internal consistency of the scale (and ultimately reliability). All items are acceptable, and there is no need to exclude any of them.

Empathy variable was measured with four items, and a sample population of 21 respondents. The reliability analysis shows that Cronbach's alpha of Empathy variable = 0.728 NoI=4 and NoR=21, which indicate greater internal consistency. All items are acceptable, and there is no need to exclude any of them.

Assurance variable was measured with four items and a sample population of 21 respondents. The reliability analysis shows that Cronbach's alpha of Assurance variable = 0.847 NoI=4 and NoR=21, which show a high level of inner consistency. All items are acceptable, and there is no need to exclude any of them.

Responsiveness variable was measured with four items and a sample population of 21 respondents. The reliability analysis shows that Cronbach's alpha of Responsiveness variable = 0.849 NoI=4 and NoR=21, which really reflect greater inner consistency. All items are acceptable, and there is no need to exclude any of them.

Reliability variable was measured with four items and a sample population of 21 respondents. The reliability analysis shows that Cronbach's alpha of Reliability variable = 0.807 NoI=4 and NoR=21, which always suggest greater internal consistency. All items are acceptable, and there is no need to exclude any of them.

Students' Satisfaction variable was measured with four items, and the sample population of 21 respondents. The reliability analysis shows that Cronbach's alpha of Student Satisfaction variable = 0.807 NoI=4 and NoR=21, which imply greater inner consistency. All items are acceptable, and there is no need to exclude any of them.

Students' Loyalty variable was measured with four items, and the sample population of 21 respondents. The reliability analysis shows that Cronbach's alpha of Student Loyalty' variable = 0.869 NoI=4 and NoR=21, involves a high level of internal consistency. All items are acceptable, and there is no need to exclude any of them.

The resulted values of Cronbach's alpha for the pilot study's variables reflect excellent reliability; therefore, the questionnaire is reliable and ready for distribution among the population sample.

Chapter Four

Data Analysis and Findings

This chapter presents the findings of the analysis carried out on the data collected through the questionnaire using the Statistical Package for Social Sciences (SPSS). The first section of this chapter discusses the descriptive analysis, including demographic Characteristics and study variables like tangibles, empathy, assurance, responsiveness, reliability, student satisfaction, and student loyalty. The next section tests the Normality, Reliability, and Hypotheses and summarizes the findings of the hypotheses test. The concluding section of this chapter develops the theoretical framework based on the hypotheses test outcomes.

4.1 Descriptive Analysis of Demographic Characteristics

This section analyzes the collected data according to the respondents' personal information, likes age, gender, HEIs, education level, and academic year.

4.1.1 Higher Education Institutions

Table 4.1 Sample Distribution According to Higher Education Institutions

Higher Education Institutions	Frequency	Percent
A'Sharqiyah University	100	32.8 %
Ibra College of Technology	80	26.2 %
Oman College of Health Science, North Sharqiyah Branch	40	13.1 %
Sur University College	58	19.0 %
College of Applied Sciences, Sur	27	8.9 %
Total	305	100 %

Table 4.1 shows that the majority of respondents, 32.8%, are from A'Sharqiyah University followed by Ibra College of Technology (26.2%). Thirdly, Sur University College was (19%), followed by, Oman College of Health Science, North Sharqiyah Branch (13.1%). Lastly, College of Applied Sciences, Sur was (8.9%).

4.1.2 Gender

Table 4.2 Sample Distribution According to Gender

Gender	Frequency	Percent
Male	102	33.4 %
Female	203	66.6 %
Total	305	100 %

Table 4.2 shows that the females outnumber males by two to one. Females enrolling in higher education are higher than males– 66.6 percent to 33.4 percent. The composition of respondents shows the actual gender imbalance in educational institutions. The imbalance may be due to more opportunities for males to work in the military field as well as in civic sectors. Conversely, this provided females a greater opportunity to pursue academic studies.

4.1.3 Age

Table 4.3 Sample Distribution According to Age

Age in Categories	Frequency	Percent
20 or less	135	44.3 %
21-25	141	46.2 %
26-30	22	7.2 %
31 or more	7	2.3 %
Total	305	100 %

Table 4.3 illustrates that the appropriate age for enrolling and receiving a diploma, bachelor's, master's degree, or any other kind of higher degree is 18 to 25 years. The respondents' age grouping less than 26 years, 90.5 percent, aligns with the observed trend. The remaining 9.5% of respondents might have enrolled in a degree program after taking a break from work to complete their higher degrees.

4.1.4 Education Level

Table 4.4 Sample Distribution According to Education Level

Education Level	Frequency	Percent
Master	4	1.3 %
Bachelor	205	67.2 %
Diploma	83	27.2 %
Other	13	4.3 %
Total	305	100 %

Table 4.4 indicates that 67.2 % of respondents enrolled in bachelor's degree and 27.2 % in diploma degree. The cumulative percentage of master's and other degrees is approximately 5.6% of all respondents.

4.1.5 Academic Year

Table 4.5 Sample Distribution According to Academic Year

Academic Year	Frequency	Percent
First Year	67	21.97%
Second Year	76	24.92%
Third Year	41	13.44%
Fourth Year	34	11.15%
Other	87	28.52%
Total	305	100 %

Table 4.5 shows that 71.48% of the respondents are from the first to the fourth academic year students and the rest of the respondents (28.52%) are from fifth-year students and others.

4.2 Descriptive Analysis of Study Variables

This summarizes the descriptive analysis of the study variables, tangibles, empathy, assurance, responsiveness, reliability, student satisfaction, and student loyalty, identified in the conceptual framework.

Likert Scale with five items and score ranges as shown in Table 4.6 for each item based on (Vagias, 2006) and, Aydin, Yaldiz, & Siramkaya (2015) approach has been used to analyze the collected study variable mean values as shown in Table 4.6.

Table 4.6 Gap Widths of Quintet Likert Scale

Item	Item description	Score range
5	Strongly agree	4.21-5.00
4	Agree	3.41-4.20
3	Neutral	2.61-3.40
2	Disagree	1.81-2.60
1	Strongly disagree	1.00-1.80

4.2.1 Tangibility

Table 4.7 Mean of Tangibility Items

Tangibility Items	N	Min.	Max.	Mean	Std. Deviation
Item 1	305	1	5	2.86	1.383
Item 2	305	1	5	3.40	1.177
Item 3	305	1	5	3.02	1.185
Item 4	305	1	5	3.41	1.155
Items 1- 4	305	1	5	3.17	1.006

The data analysis was carried out to determine the tangible items that affect the students' satisfaction level in HEIs. Descriptive statistics tabulated in Table 4.7 shows the mean scores and standard deviation score of each indicative item in Tangibles. The five-point Likert scale, represents a rating ranged from 1 (Strongly disagree) to 5 (strongly agree). The mean score is between 2.86 and 3.41 which represents the rating is in "Neutral" to "Agree". The tangible variable item 4 is in "Agree" rating, and the other three tangibles items, 1, 2, and 3, are in "Neutral" rating. The higher mean value of

items 2 and 4 indicate that it boosts student satisfaction significantly. The average standard deviation for the four items equals 1.006.

4.2.2 Empathy

Table 4.8 Mean of Empathy Items

Empathy Items	N	Min.	Max.	Mean	Std. Deviation
Item 1	305	1	5	3.19	1.167
Item 2	305	1	5	2.98	1.189
Item 3	305	1	5	3.35	1.213
Item 4	305	1	5	2.96	1.278
Items 1- 4	305	1	5	3.12	1.015

The data analysis was carried out to determine the empathy items that impact the students' satisfaction level in HEIs. Descriptive statistics tabulated in Table 4.8 shows the mean scores and standard deviation score of each representative item in empathy. The mean score is between 2.96 and 3.35 which represents the rating is "Neutral" on the Likert scale. The empathy variable items, 1, 2, 3, and 4, are in "Neutral" rating. The higher mean value of item 3 shows that it boosts student satisfaction significantly. The average standard deviation for the four items equals 1.015.

4.2.3 Assurance

Table 4.9 Mean of Assurance Items

Assurance Items	N	Min.	Max.	Mean	Std. Deviation
Item 1	305	1	5	3.04	1.207
Item 2	305	1	5	3.07	1.252
Item 3	305	1	5	3.06	1.216
Item 4	305	1	5	3.26	1.234
Items 1- 4	305	1	5	3.11	1.076

The data analysis was carried out to determine the assurance items that influence the satisfaction level of students in HEIs. Descriptive statistics tabulated in Table 4.9 illustrates the mean scores and standard deviation score of each indicative item in assurance. The mean score is between 3.04 and 3.26 which represents the rating is "Neutral" on the Likert scale. The assurance variable items, 1, 2, 3, and 4, are in

"Neutral" rating. The higher mean value of item 4 indicates that it increases student satisfaction significantly. The average standard deviation for the four items equals 1.076.

4.2.4 Responsiveness

Table 4.10 Mean of Responsiveness Items

Responsiveness Items	N	Min.	Max.	Mean	Std. Deviation
Item 1	305	1	5	3.34	1.095
Item 2	305	1	5	2.80	1.145
Item 3	305	1	5	3.18	1.178
Item 4	305	1	5	3.08	1.177
Items 1- 4	305	1	5	3.10	0.956

The data analysis was carried out to determine the responsiveness items that affect the students' satisfaction level in HEIs. Descriptive statistics tabulated in Table 4.10 represents the mean scores and standard deviation score of each indicative item in responsiveness. The mean score is between 2.80 and 3.34 which represents the rating is "Neutral" on the Likert scale. The responsiveness variable items, 1, 2, 3, and 4, are in "Neutral" rating. The higher mean value of item 1 indicates that it raises the satisfaction of students significantly. The average standard deviation for the four items equals 0.956.

4.2.5 Reliability
Table 4.11 Mean of Reliability Items

Reliability Items	N	Min.	Max.	Mean	Std. Deviation
Item 1	305	1	5	2.85	1.240
Item 2	305	1	5	2.82	1.247
Item 3	305	1	5	2.80	1.135
Item 4	305	1	5	3.30	1.248
Items 1- 4	305	1	5	2.94	0.994

The data analysis was carried out to determine the reliability items that impact the student satisfaction level in HEIs. Descriptive statistics tabulated in Table 4.11 depicts the mean scores and standard deviation score of each indicative item in reliability. The mean score is between 2.80 and 3.30 which represents the rating is "Neutral" on the Likert scale. The reliability variable items, 1, 2, 3, and 4, are in "Neutral" rating. The

higher mean value of item 4 indicates that it increases the satisfaction of students significantly. The average standard deviation for the four items equals 0.994.

4.2.6 Students Satisfaction

Table 4.12 Mean of Student Satisfaction Items

Student Satisfaction Items	N	Min.	Max.	Mean	Std. Deviation
Item 1	305	1	5	2.98	1.163
Item 2	305	1	5	3.07	1.274
Item 3	305	1	5	2.71	1.120
Item 4	305	1	5	2.94	1.246
Items 1- 4	305	1	5	2.92	1.042

The data analysis was carried out to determine the student satisfaction items that influence the student loyalty level in HEIs. Descriptive statistics tabulated in Table 4.12 explains the mean scores and standard deviation score of each indicative item in student satisfaction. The mean score is between 2.71 and 3.07 which represents the rating is "Neutral" on the Likert scale. The student satisfaction variable items, 1, 2, 3, and 4, are in "Neutral" rating. The higher mean value of item 2 shows that it boosts student loyalty significantly. The average standard deviation for the four items equals 1.042.

4.2.7 Students Loyalty

Table 4.13 Mean of Student Loyalty

Student Loyalty	N	Min.	Max.	Mean	Std. Deviation
Item 1	305	1	5	3.27	1.178
Item 2	305	1	5	2.91	1.282
Item 3	305	1	5	2.99	1.246
Item 4	305	1	5	2.75	1.368
Items 1- 4	305	1	5	2.98	1.094

Descriptive statistics tabulated in Table 4.13 demonstrates the mean scores and standard deviation score of each indicative item in student loyalty. The mean score is between 2.75 and 3.27 which represents the rating is "Neutral" on the Likert scale. The student loyalty variable items, 1, 2, 3, and 4, are in "Neutral" rating. The average standard deviation for the four items equals 1.094.

4.3 Normality Analysis

One of the basic assumptions of most statistical methods is the normal distribution of a sample. Linear regression analysis and parametric statistical analysis, like t-tests, imply that interpretation and outcomes cannot be valid or reliable if the normal distribution is broken. Before continuing with any related statistical procedures, it is important to verify the normality of samples. For the population sample, there are three main ways to verify the assumptions of normality. There are graphical tools (histograms, Q-Q-plots, box plots), formal measures of normality, and numerical methods (kurtosis, indices of skewness), (Mohd Razali & Bee Wah, 2011).

The Q-Q chart below shows that the service quality attributes data obtained is normally distributed.
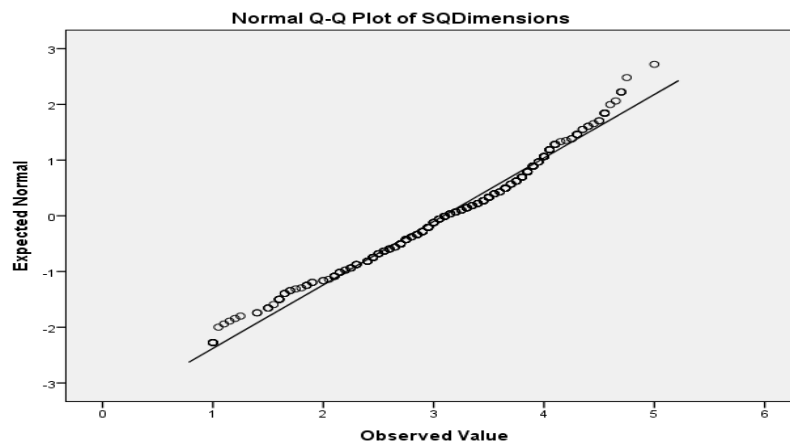
Figure 4.1 Normal Q-Q Plot of Service Quality Dimensions

The below Q-Q plot display that the collected data of the student satisfaction variable is distributed normally
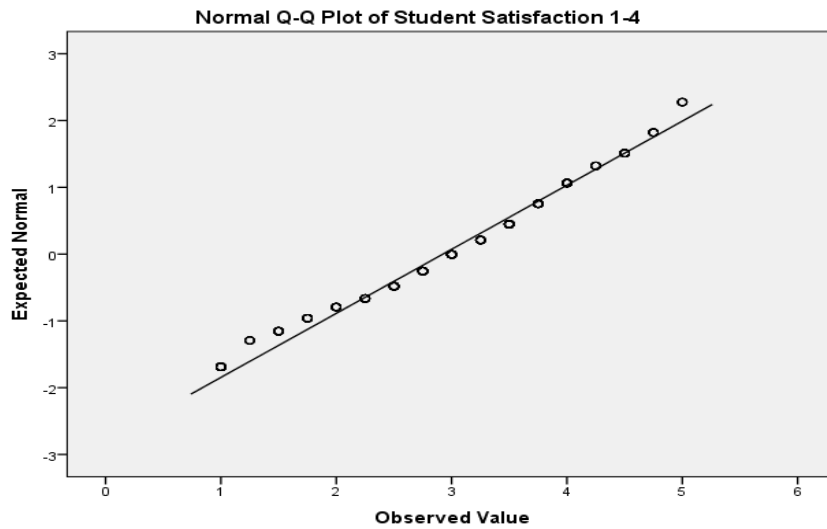
Figure 4.2 Normal Q-Q Plot of Students Satisfaction

The following Q-Q plot indicates that the student loyalty variable gathered data obtained is normally distributed.
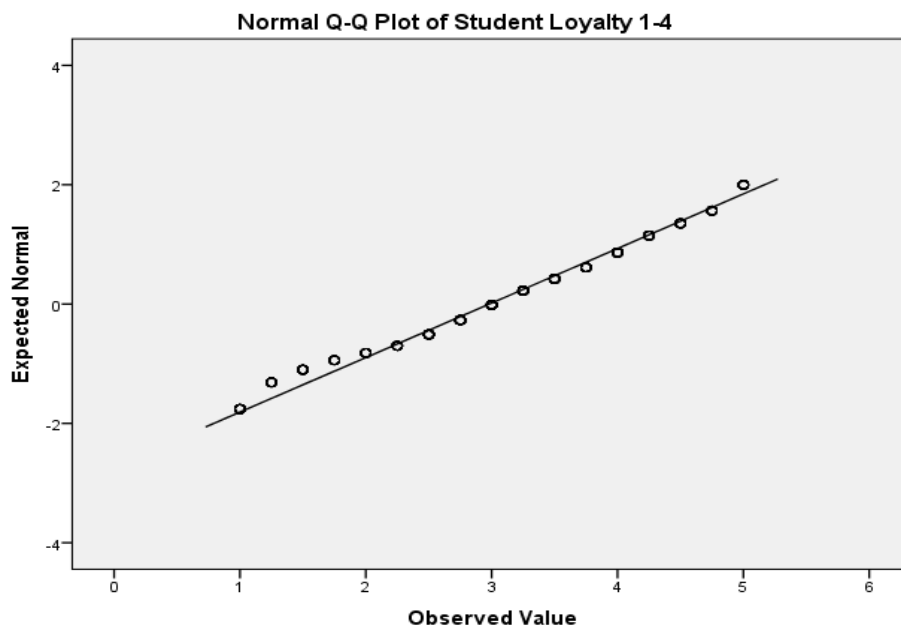
Figure 4.3 Normal Q-Q Plot of Students Loyalty

4.4 Reliability Test

This part of the study analyzes the reliability of study variables according to Cronbach's alpha of the collected data for each variable (tangibility, empathy, assurance, responsiveness, reliability, student satisfaction, and student loyalty).

Table 4.14 Cronbach's Alpha of Study Variables

Variables	Number of Items (NoI)	Number of Respondents (NoR)	Cronbach's Alpha
Tangibility	4	305	0.837
Empathy	4	305	0.857
Assurance	4	305	0.900
Responsiveness	4	305	0.851
Reliability	4	305	0.832
Student Satisfaction	4	305	0.884
Student Loyalty	4	305	0.890

The tangibility variable was measured by four items and a sample population of 305 respondents. The reliability analysis shows that Cronbach's alpha of Tangibility variable = 0.837 NoI=4 and NoR=305, which indicates a high level of internal consistency of the scale. All items are acceptable, and there is no need to exclude any of them.

The empathy variable was measured with four items, and a sample population of 305 respondents. The reliability analysis shows that Cronbach's alpha of Empathy variable = 0.857 NoI=4 and NoR=305, which suggests a high degree of internal scale consistency. All items are acceptable, and there is no need to exclude any of them.

The assurance variable was measured with four items and a sample population of 305 respondents. The reliability analysis shows that Cronbach's alpha of Assurance

variable = 0.900 NoI=4 and NoR=305, which means the scale has a high degree of internal consistency. All items are acceptable, and there is no need to exclude any of them.

The responsiveness variable was tested with four items and a sample population of 305 respondents. The reliability analysis shows that Cronbach's alpha of the responsiveness variable = 0.851 NoI=4 and NoR=305, which indicates a high level of the scale's internal consistency. All items are acceptable, and there is no need to exclude any of them.

The reliability variable was evaluated with four items and a sample population of 305 respondents. The reliability analysis shows that Cronbach's alpha of Reliability variable = 0.832 NoI=4 and NoR=305, which shows that the scale has a high degree of internal consistency. All items are acceptable, and there is no need to exclude any of them.

Student Satisfaction variable was assessed with four items, and a sample population of 305 respondents. The reliability analysis shows that Cronbach's alpha of Student Satisfaction variable = 0.884 NoI=4 and NoR=305, this suggests a high degree of the scale's internal consistency. All items are acceptable, and there is no need to exclude any of them.

Student Loyalty variable was analyzed with four items, and a sample population of 305 respondents. The reliability analysis shows that Cronbach's alpha of Student Loyalty' variable = 0.890 NoI=4 and NoR=305, this ensures that the scale has a high internal consistency. All items are acceptable, and there is no need to exclude any of them.

The resulted values of Cronbach's alpha for the study variables reflect excellent reliability; therefore, the distributed questionnaire is reliable and confirmed the internal consistency and reliability of the study variables items.

4.5 Hypotheses Tests

This research used several analysis tools, for instance, the Pearson correlation coefficient, linear and multiple regression tests to examine the study hypotheses.

This research used the SPSS program to inspect the gathered data and test the study hypothesis in order to find the relationship between the study variables.

For study hypotheses, there are two types of statistical tests: either null hypothesis or alternative hypothesis. The null hypothesis implies that the independent and dependent variables have no change and no relationship ($\mu^1 = \mu^2$). Conversely, the alternative hypothesis suggests that independent and dependent variables are related, either positive or negative ($\mu^1 \neq \mu^2$). The selection of an appropriate statistical technique for research hypotheses is based on the correlation significant value (p-value) if it's less than the determined value (p-value < 0.05) then the researcher has to select the alternative hypothesis and refuse the null hypothesis.

Moreover, the null hypothesis is chosen in case the P-value is higher than the determined value (P-value >0.05)(Landau & Everitt Chapman, 2004).

To analyze the relationships and associations between independent and dependent variables, the Pearson correlation coefficient (R) and linear regression are used. In terms of direction, significance, and strength of this relationship, R is applied to describe a relationship between variables. The signs of the correlation coefficient (positive or negative) indicate the direction of the relationship, while the value determines the strength of the relationship. The below table illustrates the strength of the relations between variables (Perry, Brownlow, & Cozens, 2004).

Table 4.15 Strength of Relations between Variables

S. No.	Correlation coefficient (R)	Relation strength
1	Less than 0.29	Weak
2	From 0.3 to 0.49	Moderate
3	More than 0.5	Strong

The multiple regression test is implemented to analyze the relation between two or more dependent and independent variables. Also, it is used to differentiate between the importance of each variable and its influence in the relation (Perry R. Hinton et al., 2004).

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The below analysis of collected data used to examine the study hypotheses and the relationship between variables based on the Pearson correlation coefficient, linear regression, and multiple regression tests.

H 1.a: There is a significant positive relationship between tangibility in service quality and students' satisfaction

A Pearson correlation analysis was conducted to examine the relationship between the tangibility and students' satisfaction variables at HEIs in Oman. The findings showed there was a significant positive correlation between tangibility and the satisfaction of students. Moreover, (R = 0.573 indicated a strong positive correlation, number of samples (N) = 305, significant (sig.) = 0.000. A higher level of tangibility variable of service quality is associated with a higher level of students' satisfaction at HEIs in Oman (see Table 4.16).

Table 4.16 Correlation between Tangibility and Students Satisfaction

		Tangibility 1-4	Student Satisfaction 1-4
Tangibility 1-4	R	1	0.573**
	Sig. (2-tailed)		0.000
	N	305	305
Student Satisfaction 1-4	R	0.573**	1
	Sig. (2-tailed)	0.000	
	N	305	305
** R is significant at the 0.01 level (2-tailed).			

The graph below shows the R-square value (0.329 or 32.9 %), which describes the ratio of the difference in satisfaction of students explained by the tangible variable. Also, p-value = 0.000, which is less than 0.05, which means that the tangible variable is strongly related to the satisfaction of students. Also, R (0.573) shows that the tangibility variable is positively related to student satisfaction.

Figure 4.4 Value of R squer between Tangibility and Students Satisfaction

Findings: The tested hypothesis (H1.a) of this dissertation is accepted, and the results show that tangible in service quality has a significant positive relationship with students' satisfaction.
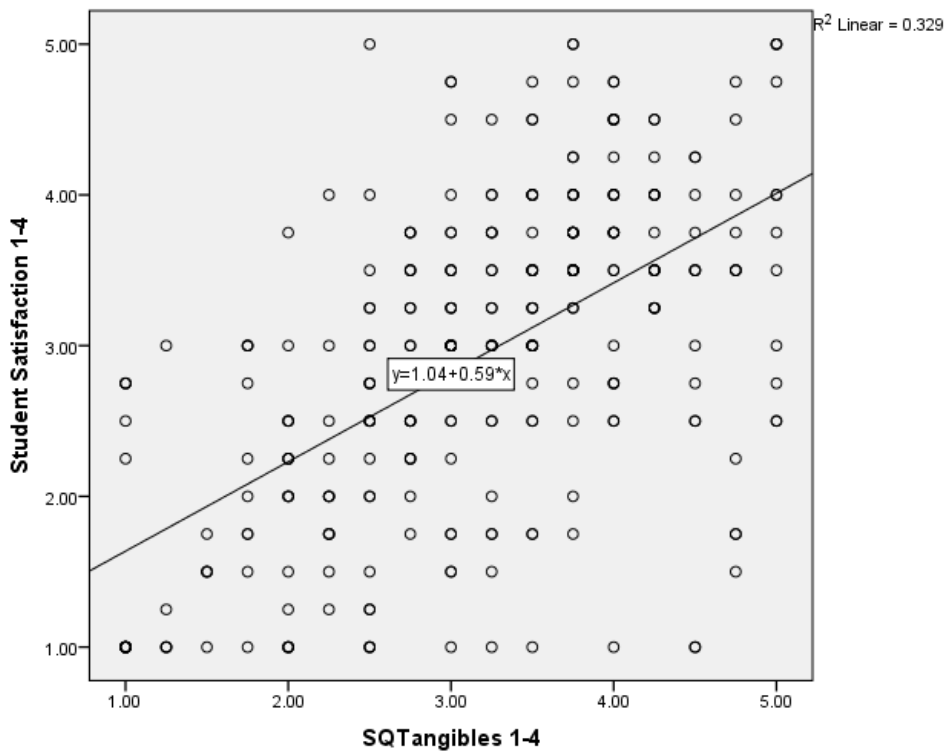
H 1.b: There is a significant positive relationship between reliability in service quality and students' satisfaction

A Pearson correlation analysis was conducted to examine the connection between both the reliability variable and students' satisfaction at HEIs in Oman. The results revealed there would be a significant positive correlation between reliability and satisfaction of students. Moreover, the correlation coefficient (r) of 0.75 indicated a strong positive correlation. (R = 0.750, N = 305, sig. = 0.000). A higher level of reliability variable of service quality is linked with a higher level of students' satisfaction at HEIs in Oman (see Table 4.17).

Table 4.17 Correlation between Reliability and Students Satisfaction

		Reliability 1-4	Student Satisfaction 1-4
Reliability 1-4	R	1	0.750**
	Sig. (2-tailed)		0.000
	N	305	305
Student Satisfaction 1-4	R	0.750**	1
	Sig. (2-tailed)	0.000	
	N	305	305
** R is significant at the 0.01 level (2-tailed).			

The below chart illustrates the value of R-square (0.563 or 56.3%) which illustrates the percentage of difference in the dependent variable (satisfaction of students) explained by the independent variable (reliability). Also, the p-value equal 0.000, which is less than 0.05, and that means the reliability variable, is significantly related to students' satisfaction. Also, R (0.750) shows that the reliability variable is positively connected to satisfaction of students.

Figure 4.5 Value of R-Square between Reliability and Students Satisfaction

Findings: The tested hypothesis (H1.b) of this dissertation is accepted, and the results show that reliability in service quality has a significant positive relationship with students' satisfaction.
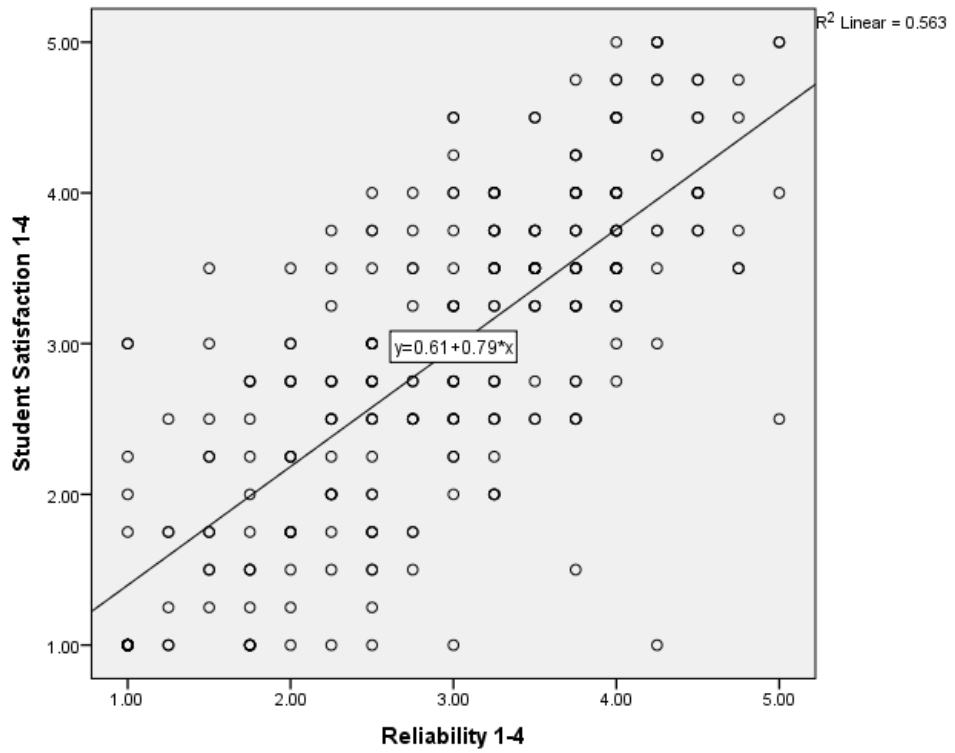
H 1.c: There is a significant positive relationship between responsiveness in service quality and students' satisfaction

A Pearson correlation study was performed to analyze the kind of relation between the responsiveness variable and the students' satisfaction. at HEIs in Oman. The results revealed that there was a significant positive link between responsiveness and satisfaction of students. Moreover, the correlation coefficient (r) of 0.71 indicated a strong positive correlation. (R = 0.712, N = 305, sig. = 0.000). An upper level of responsiveness variable is connected with a higher level of students' satisfaction at HEIs in Oman (see Table 4.18).

Table 4.18 Correlation between Responsiveness and Students Satisfaction

		Responsiveness 1-4	Student Satisfaction 1-4
Responsiveness 1-4	R	1	0.712^{**}
	Sig. (2-tailed)		0.000
	N	305	305
Student Satisfaction 1-4	R	0.712^{**}	1
	Sig. (2-tailed)	0.000	
	N	305	305
** R is significant at the 0.01 level (2-tailed).			

The below chart illustrates the value of R-square (0.508 or 50.8%) which explains the variance degree in the students' satisfaction that is described by the responsiveness variable. Also, the p-value is 0.000, which is less than 0.05, and that means the responsiveness variable is significantly related to students' satisfaction. Also, R (0.712) shows that the responsiveness variable is positively related to student satisfaction.

Figure 4.6 Value of R-Square between Responsivness and Students Satisfaction

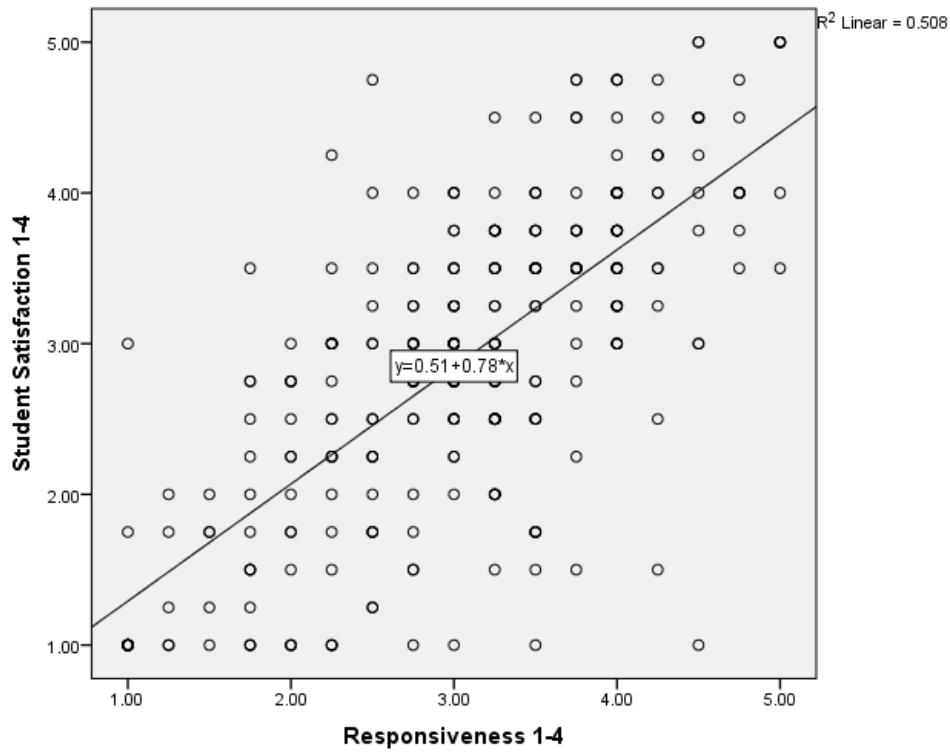Findings: The tested hypothesis (H1.c) of this dissertation is accepted, and the results show that there is a significantly positive relationship between responsiveness in service quality and students' satisfaction.

H 1.d: There is a significant positive relationship between assurance in service quality and students' satisfaction

The hypothesis H1.d which connects assurance and students' satisfaction variable at HEIs in Oman was studied by using the Pearson correlation analysis. The findings demonstrate assurance linked to student satisfaction significantly and positively. Moreover, R equal 0.709 which indicated a strong positive correlation. (R = 0.709, N = 305, sig. = 0.000). A higher level of assurance variable of service quality is related to a higher level of students' satisfaction at HEIs in Oman (see Table 4.19).

Table 4.19 Correlation between Assurance and Students Satisfaction

		Assurance 1-4	Student Satisfaction 1-4
Assurance 1-4	R	1	0.709^{**}
	Sig. (2-tailed)		0.000
	N	305	305
Student Satisfaction 1-4	R	0.709^{**}	1
	Sig. (2-tailed)	0.000	
	N	305	305
** R is significant at the 0.01 level (2-tailed).			

The below chart illustrates the value of R-square (0.502 or 50.2%) which illustrated the difference percentage in the satisfaction of students that is evaluated by the assurance variable. Also, sig. (p-value) is 0.000, which is less than 0.05, and that means the assurance variable is significantly related to students' satisfaction. Also, R (0.709) shows that the assurance variable is positively related to student satisfaction.

The scatter plot shows R² Linear = 0.502 with regression equation y=0.79+0.69*x, plotting Student Satisfaction 1-4 (y-axis) against Assurance 1-4 (x-axis).

Figure 4.7 Value of R-Square between Assurance and Students Satisfaction

Findings: The tested hypothesis (H1.d) of this dissertation is accepted, the findings indicate that assurance in service quality has a significant and positive relationship with the satisfaction of students.
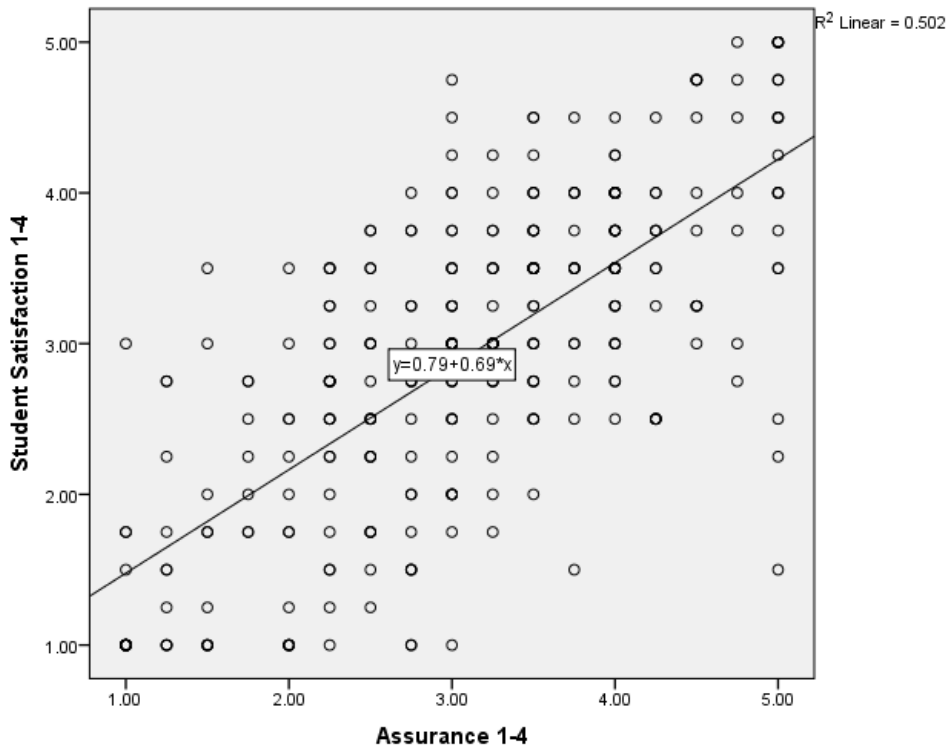
H 1.e: There is a significant positive relationship between empathy in service quality and students' satisfaction

The relationship between the empathy variable and students' satisfaction variable was examined by using Pearson correlation analysis. The findings showed that the empathy variable has a significant positive relationship with satisfaction of students. Moreover, the correlation coefficient indicated a strong positive correlation. (R= 0.750, N = 305, sig. = 0.000). A higher level of empathy variable is associated with a higher level of students' satisfaction at HEIs in Oman (see Table 4.20).

Table 4.20 Correlation between Empathy and Students Satisfaction

		Empathy 1-4	Student Satisfaction 1-4
Empathy 1-4	R	1	0.750**
	Sig. (2-tailed)		0.000
	N	305	305
Student Satisfaction 1-4	R	0.750**	1
	Sig. (2-tailed)	0.000	
	N	305	305
** R is significant at the 0.01 level (2-tailed).			

The below chart illustrates the value of R-square (0.563 or 56.3%) which explains the variation proportion of students' satisfaction that is clarified by the empathy variable. Also, p-value = 0.000, which is < 0.05, and that means empathy variable is significantly related to students' satisfaction. Also, R (0.750) shows that the empathy variable is positively related to student satisfaction.

Figure 4.8 Value of R-Square between Empathy and Students Satisfaction

Findings: The tested hypothesis (H1.e) of this dissertation is accepted, and results show that empathy in service quality-related positively and significantly to students' satisfaction.
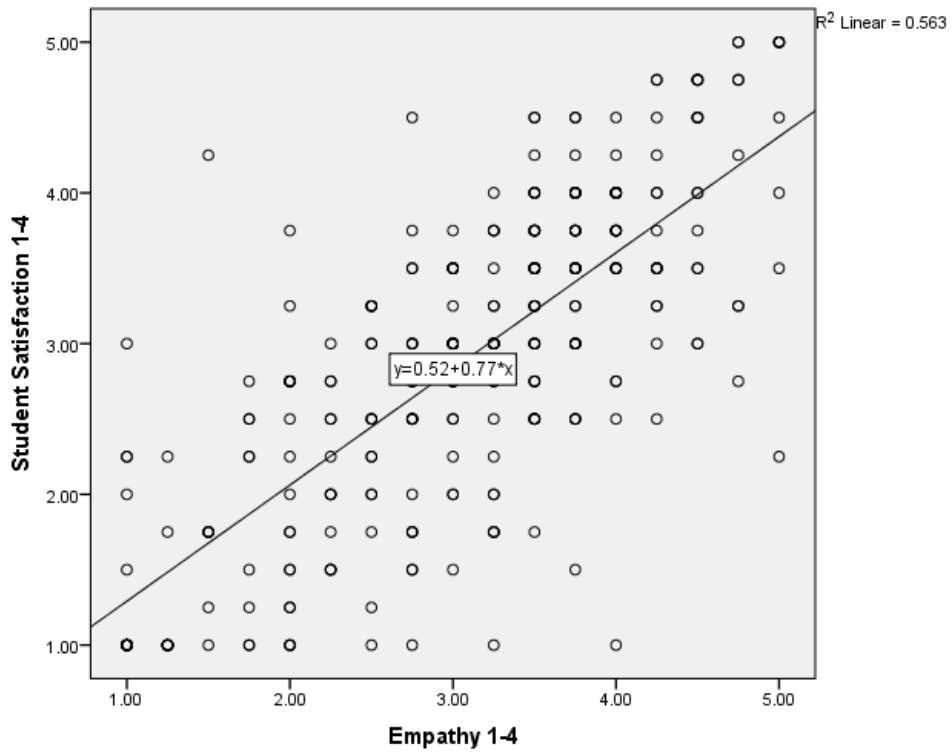
H 1: There is a significant positive relationship between service quality dimensions and students' satisfaction

The relationship between malty independent variables and a dependent variable is tested using a multiple regression test (Perry, Brownlow, & Cozens, 2004). This research used multiple regression tests to examine hypothesis # 1 which studies the overall impact of service quality characteristics (reliability, empathy, responsiveness, assurance, and tangibility) as an independent variable (IDV) on students' satisfaction as a dependent variable (DV). The below tables show the analysis of the multiple regression tests for overall service quality attributes and students' satisfaction.

Table 4.21 Descriptive Statistics & Correlations of Overall Service Quality & Student Satisfaction

Variables	N	Mean	r with Student Satisfaction	P-value
Student Satisfaction	305	2.9246	1.000	
Tangibility	305	3.1705	0.573	0.000
Reliability	305	2.9402	0.750	0.000
Responsiveness	305	3.1016	0.712	0.000
Assurance	305	3.1082	0.709	0.000
Empathy	305	3.1197	0.750	0.000

The above table displays the descriptive statistics and the correlation for the population sample of this study which have explained in the above part (N = 305, R for Tangible variable = 0.573 & R for other variables > 0.700, sig. = 0.000 < 0.05)

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Table 4.22 Multiple Regression Test Results

Descriptive Statistics		Model Summary		ANOVA [a]		Coefficients [a]	
Variables		R	R Square	F	Sig.	Beta	Sig.
Service Quality Attributes	Tangibility	0.814[a]	0.662	117.170	0.000[b]	0.102	0.025
	Reliability					0.298	0.000
	Responsiveness					-0.004	0.956
	Assurance					0.182	0.004
	Empathy					0.339	0.000
a. DV: Student Satisfaction							
b. Predictors: (Constant), Tangibility, Empathy, Assurance, Responsiveness, and Reliability							

The above table summarizes the multiple regression test results. The Model Summary table show that R equals 0.814 and R Square equal 66.2% which explains the degree of variation in the student satisfaction. Also, the ANOVA table shows F = 117.170, P- value = 0.000 < 0.01 which is revealed to be statistically significant. The Coefficients table tests the individual independent variables and their impact on students' satisfaction comparing with other variables. It concludes that overall dimensions of service quality have a positive significant relationship with student satisfaction.

Findings: The tested hypothesis (H1) of this dissertation is accepted, and findings show that the dimensions of service quality posses a significant positive relationship with the satisfaction of students.

H 2: There is a significant positive relationship between service quality dimensions and students' loyalty

The multiple regression tests is implemented to analyze hypothesis # 2, which studies the overall effect of the dimensions of service quality as an independent variable on the loyalty of students as a dependent variable. The below table shows the analysis of the multiple regression tests for overall service quality characteristics and students' loyalty.

Table 4.23 Descriptive Statistics & Correlations of Overall Service Quality & Student Loyalty

Variables	N	Mean	R with Student Loyalty	P-value
Student Loyalty	305	2.9811	1.000	
Tangibility	305	3.1705	0.491	0.000
Reliability	305	2.9402	0.654	0.000
Responsiveness	305	3.1016	0.639	0.000
Assurance	305	3.1082	0.697	0.000
Empathy	305	3.1197	0.688	0.000

Descriptive statistics and correlations for the population sample of this study are shown in the table above, which shown (N = 305, R 'Tangibility' = 0.491 & for other variables > 0.6, sig. = 0.000 < 0.05)

Table 4.24 Multiple Regression Test Results

Descriptive Statistics		Model Summary		ANOVA [a]		Coefficients [a]	
Variables		R	R Square	F	Sig.	Beta	Sig.
Service Quality Dimensions	Tangibility	0.750[a]	0.563	76.937	0.000[b]	0.074	0.153
	Reliability					0.163	0.029
	Responsiveness					-0.082	0.316
	Assurance					0.368	0.000
	Empathy					0.313	0.000
a. DV: Student Loyalty							
b. Predictors: (Constant), Tangibility, Empathy, Assurance, Responsiveness, and Reliability							

The above table summarizes the multiple regression test results. The Model Summary part shows that R equals 0.814 and R Square equals 56.3%, which explains the variation percentage in student loyalty. Also, the ANOVA a part shows F = 76.937, P-value = 0.000 < 0.01 which is revealed to be statistically significant. The overall dimensions of service quality therefore related significantly with the loyalty of students.

Findings: The tested hypothesis (H2) of this dissertation is accepted, and the results demonstrate that the dimensions of service quality are related significantly and positively with students' loyalty.

H 3: There is a significant positive relationship between students' satisfaction and students' loyalty

In order to analyze the relationship between the satisfaction variable of students and the loyalty of students at HEIs in Oman, a Pearson correlation study was performed. The results revealed that students' satisfaction and students' loyalty were related significantly and positively. Moreover, the findings indicated a strong positive correlation (R = 0.82, N = 305, sig. = 0.000). A higher degree of students' satisfaction variable is related to an upper degree of students' loyalty at HEIs in Oman (see Table 4.25).

Table 4.25 Correlation between Students Satisfaction and Students Loyalty

		Student Satisfaction 1-4	Student Loyalty 1-4
Student Satisfaction 1-4	R	1	0.819**
	Sig. (2-tailed)		0.000
	N	305	305
Student Loyalty 1-4	R	0.819**	1
	Sig. (2-tailed)	0.000	
	N	305	305
**R is significant at the 0.01 level (2-tailed).			

The below chart illustrates the value of R-square (0.671 or 67.1%) which explains the level of variation in the students' loyalty that is described by the students' satisfaction. Also, P-value is 0.000, which is less than 0.05, and that means students' satisfaction variable is significantly related to students' satisfaction. Also, R (0.819) presents that the satisfaction of students is significantly and positively related to loyalty of students.
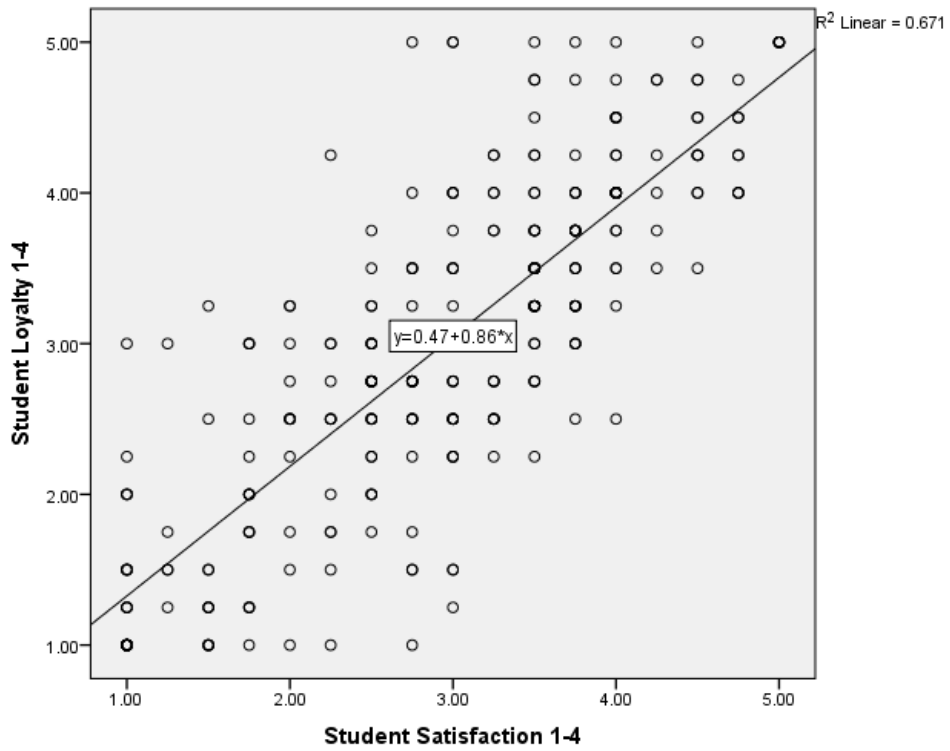
Figure 4.9 Value of R- Squer between Students Satisfaction and Students Loyalty

Findings: The tested hypothesis (H3) of this dissertation is accepted, and results show that the students' satisfaction and students' loyalty are linked positively and significantly.

H4: Gender moderates the relation between students' satisfaction and students' loyalty

This research used SPSS to examine hypothesis #4, which assumes that gender has a moderating relation between students' satisfaction and loyalty of students. The SPSS Macro program tests the relationship between the satisfaction of students and students' loyalty where the gender variable plays a role as moderator and if the gender is significant or not. The results revealed that overall model has a significant relationship (N = 305, sig. = 0.000 <0.01). Also, the below table shows that R-square (0.674 or 67.4%), which explains the proportion of variation in the dependent variable (student's loyalty) and F= 207.810.

To examine hypothesis #4, it is required to study the interrelationship between the hypothesis variables and the extent of their influence on each other. The coefficients part in the below table illustrates the impact of students' satisfaction and gender on the relation with students' loyalty.

 The student's satisfaction is an independent variable and related significantly with student loyalty (Beta = 1.004, P-value = 0.000 < 0.01). Oppositely, the relation between gender and students' loyalty is an insignificant relation (Beta = 0.0851, P-value = 0.267 > 0.01) as well the interaction relation between students' satisfaction and gender is insignificant relation (Beta = -0.0885, P-value = 0.228> 0. 01).

The above results indicate that there is a strong direct correlation seen between satisfaction of students and the loyalty of students, but gender as a moderator does not have a significant impact on this relation. Therefore, the gender variable does not play a moderator role between the two mentioned variables, satisfaction and loyalty of students.

Table 4.26 Macro Process Test Details for Moderator

Descriptive Statistics	Model Summary		ANOVA [a]		Coefficients [a]		
Variables	R	R Square	F	Sig.	Beta	T	Sig.
Constant					2.843	21.456	0.000
Student satisfaction (SS)	0.821a	0.674	207.810	0.000b	1.004	7.919	0.000
Gender (G)					0.0851	1.113	0.267
Interaction (SS x G)					-0.0885	-1.207	0.228
a. DV: Student loyalty							
b. Predictors: Student satisfaction, Gender and interaction between SS & G							

Gender

Beta= -0.089

P-value= 0.228>0.01

(Insignificant Relationship)

Students Satisfaction

Students Loyalty

Beta= 1.004

P-value= 0.000<0.01
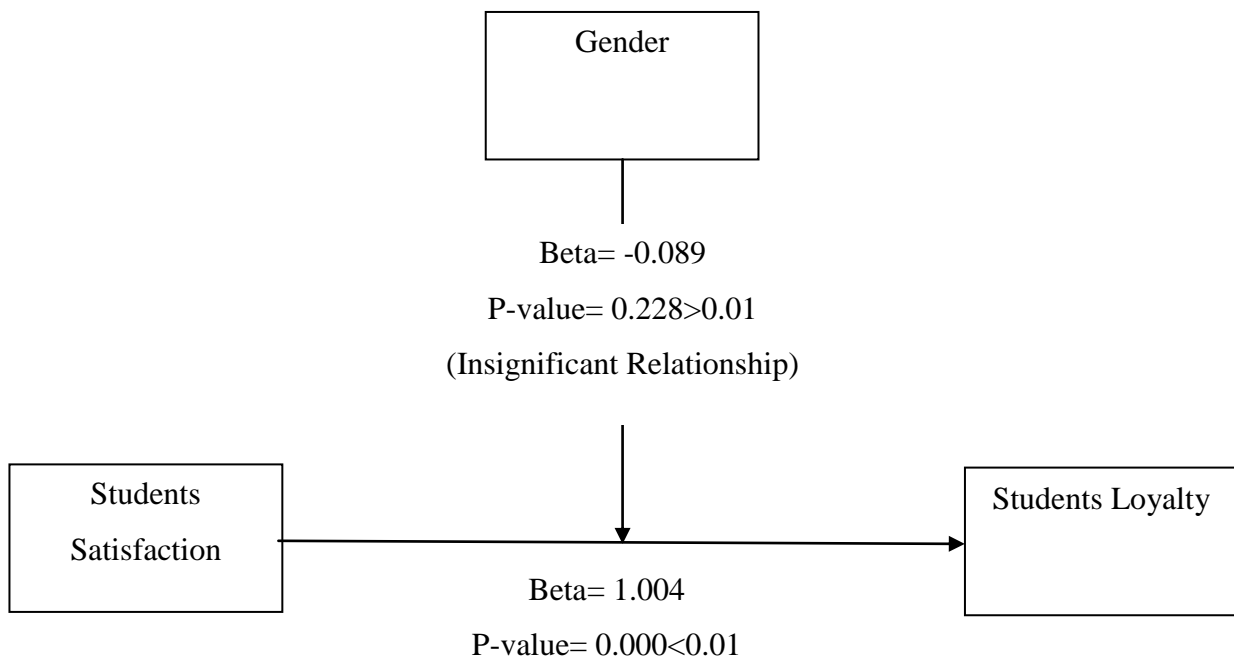
Figure 4.10 Significant & Impact of Moderator

Findings indicate that the tested hypothesis (H4) of this dissertation is rejected since results show that gender has an insignificant relationship between students' satisfaction and students' loyalty, so this relationship was not moderated by gender variable.

4.6 Role of Students Satisfaction in the Relationship between Service Quality Dimensions and Students Loyalty

After examining the hypothesis that links the dimensions of service quality and the loyalty of students. This part also examines the role of students' satisfaction variable in this relationship if it's work as a mediator or not as well as the kind of mediation role if it's fully or partially.

This study analysis effects of the mediator variable by using Process Macro in SPSS through using linear regression correlations tests. The Process Macro tests the relationship between service quality characteristics (IDV) and student's loyalty (DV) with student's satisfaction (as a mediator). The tables and charts below illustrate the relationship between IDV and DV with the mediator's effects.

Table 4.27 Process Macro Test Details for Mediator - Outcome: Students satisfaction

Descriptive Statistics	Model Summary			ANOVA [a]		Coefficients [a]		
Variables	R	R Square	P-value	F	Sig.	Beta	T	Sig.
(Constant)						-0.02 0	-0.16 0	0.870
Service Quality Dimensions	0.800	0.650	0.000	551.900	0.000b	0.950	23.940	0.000
a. DV: Students Satisfaction								
b. Predictors: Service Quality Dimensions								

The above table analyzes the relationship between characteristics of service quality (IDV) and students' satisfaction (DV). The results illustrate that these variables are related significantly (P-value = 0.000 < 0.01) and around 65% of variance in students' satisfaction (R square=0.650). Moreover, the ANOVA table shows (F = 551.90, P-value = 0.000 < 0.01). Finally, coefficient table shows (Beta = 0.950, P-value = 0.000 < 0.01) which reflects a significant positive connect both variables; service quality dimensions and students' satisfactions (Beta= 0.950).

Service Quality Dimensions	Beta=0.950 →	Students Satisfaction
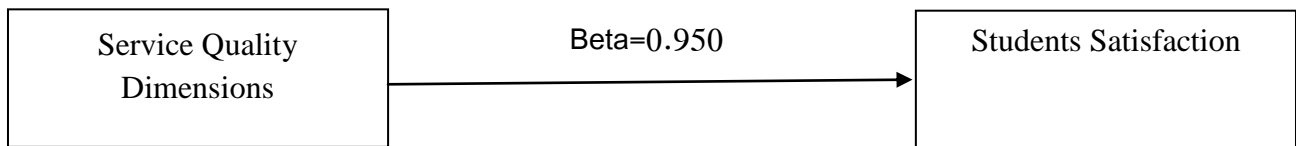
Figure 4.11 Impacts of Service Quality Dimensions on Students Satisfaction

Table 4.28 Process Macro Test Details for Mediator - Outcome: Students Loyalty

Descriptive Statistics	Model Summary			ANOVA [a]		Coefficients [a]		
Variables	R	R Square	P-value	F	Sig.	Beta	T	Sig.
(Constant)	0.730	0.530	0.000	345.100	0.000b	0.170	1.100	0.27 0
Service Quality Dimensions						0.908	18.580	0.000
a. DV: Students Loyalty								
b. Predictors: Service Quality Dimensions								

The above table analyzes the direct relationship that link the service quality factors (IDV) with students' loyalty (DV). The findings indicate that there is an essential relationship between those variables. P-value = 0.000 < 0.01 and around 53% of variance in students' loyalty (R square= 0.530). Moreover, the ANOVA table shows (F = 345.100, P-value = 0.000 < 0.01). Finally, coefficient table shows (Beta = 0.908, P-value = 0.000 < 0.01) which reflects a significant positive relation connect attributes of service quality with loyalty of students (Beta= 0.908).

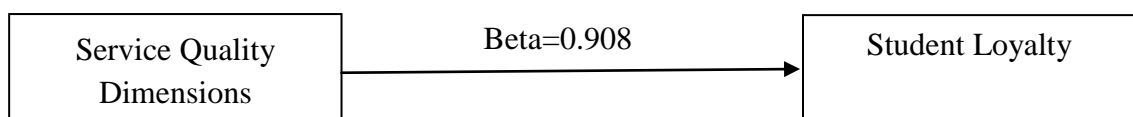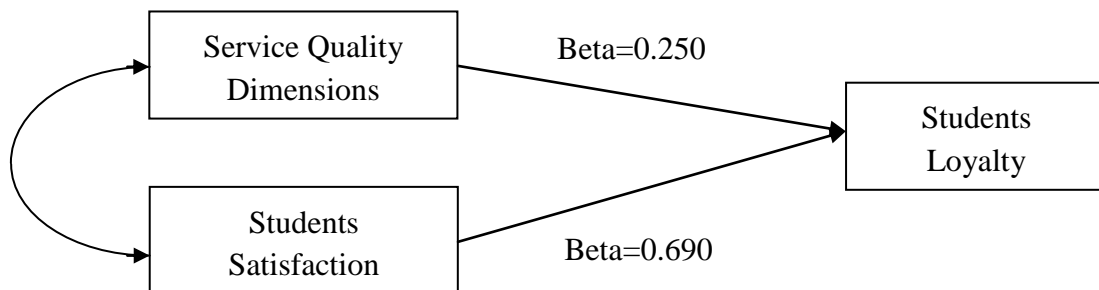| Service Quality Dimensions	Beta=0.908 →	Student Loyalty

Figure 4.12 Impacts of Service Quality Dimensions on Student Loyalty

Table 4.29 Process Macro Test Details for Mediator - Outcome: Students' Loyalty

Descriptive Statistics	Model Summary			ANOVA [a]		Coefficients [a]		
Variables	R	R Square	P-value	F	Sig.	Beta	T	Sig.
(Constant)	0.830	0.690	0.000	329.430	0.000b	0.190	1.450	0.150
Service Quality Dimensions						0.250	3.720	0.000
Student satisfaction						0.690	12.130	0.000
a. DV: Student Loyalty								
b. Predictors: Service Quality Dimensions and Student's Satisfaction								

The above table analyzes the relationship between factors of service quality and students' satisfactions (predictors) and students' loyalty (DV). The analysis showed that these variables are significantly related (P-value = 0.000 < 0.01) and around 69% of variance in students' loyalty (R square=0.690). Moreover, the ANOVA table shows (F = 329.430, P-value = 0.000 < 0.01). Finally, coefficient table percents that the service quality dimensions has (Beta = 0.250, P-value = 0.000 < 0.01) and students' satisfaction has (Beta = 0.690, P-value = 0.000 < 0.01) which reflect a significant positive relation between attributes of service quality (Beta = 0.250) and students' satisfactions (Beta = 0.690) with student loyalty.

Figure 4.13 Impacts of Service Quality Dimensions and Students Satisfuction on Students Loyalty

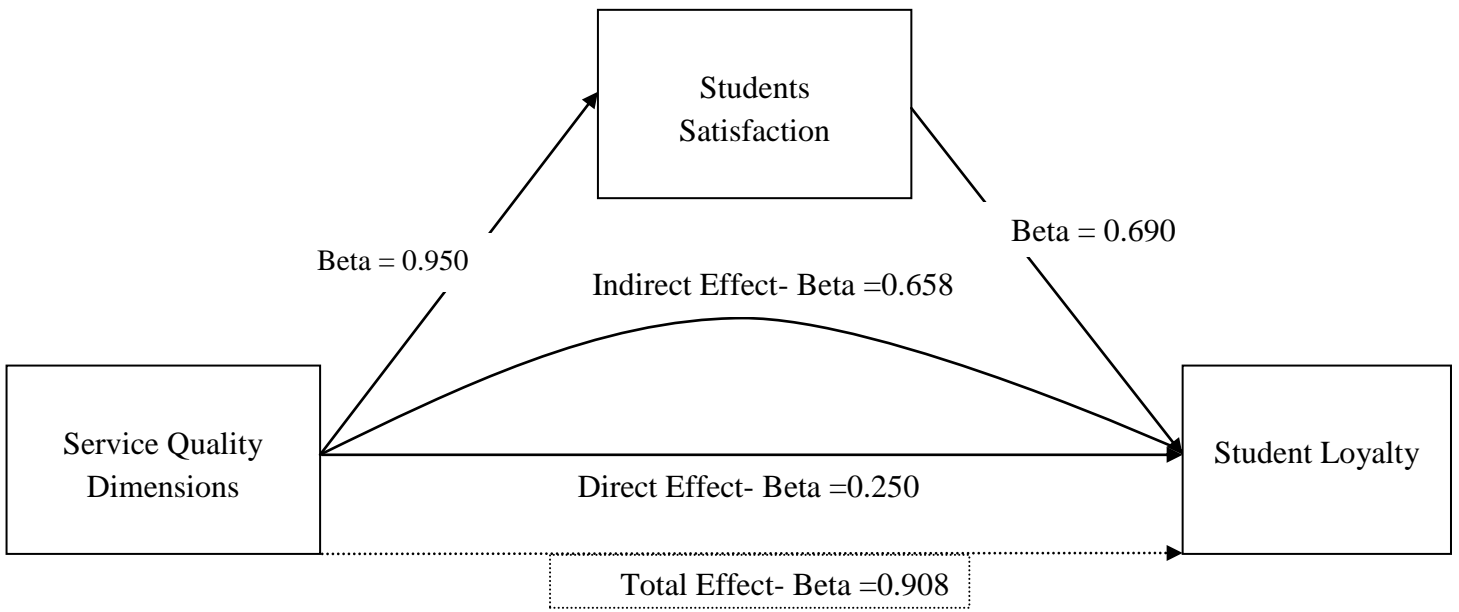**Table 4.30 Direct and Indirect Effects of Mediator**

Description	Effect	BootSE	BootLLCI	BootULCI	P-value
Direct effect of Service Quality Dimensions on Loyalty of Students	0.250	0.068	0.118	0.384	0.000
Indirect effect of Service Quality Dimensions on Loyalty of Students	0.658	0.060	0.538	0.773	-
Total effect on Students Loyalty	0.908	0.049	0.813	1.006	0.000

In order to study the influence of the mediator in the conceptual framework, the above table summarizes the direct and indirect impacts on the IDV, mediator, and DV.

The bootstrap standard errors and confidence intervals are utilized to exam the indirect impact on the relationship. There is a significant effect of a mediator if the interval between BootLLCI & BootULCI not fills in the zero, in other words, if the interval fills outside the zero. On the other hand, if the boundary of confidence interval (lower and upper - 95 %) fills in zero; then the mediator has not any effect (Prado, Korelo, & Silva 2014).

The above table shows the indirect effect = 0.658 for 95% confidence interval (BootLLCI = 0.538 & BootULCI=0.773) which is not filled in the zero value since the upper & lower boundary both are positive, so the mediator has a significant positive influence. Moreover, the findings show that the students' satisfaction is playing a mediator role between service quality factors and students' loyalty with a significantly positive effect.

Also, the above table illustrates that the service quality characteristics (IDV) and students' loyalty (DV) are related significantly where P-value =0.000 < .01 and Beta = 0.250 which shows that the direct influence is less than the indirect influence. Therefore, the mediator in this relation has a partially significant effect.

Figure 4.14 Direct and Indirect Effects of Mediator

Findings: Students' satisfaction works as a mediator with a significant partial effect between service quality dimensions and students' loyalty.

4.7 Accepted Hypotheses

From the above analysis for the study's hypotheses, the below table summarizes the findings of the tested hypotheses.

Table 4.31 Findings of the Study's Tested Hypotheses

Hypothesis No.	Tested Hypotheses	Findings	Remark
H1	There is a significant positive relationship between service quality dimensions and students' satisfaction	Service quality dimensions have a significant positive relationship with students' satisfaction	Accepted
H1. a	There is a significant positive relationship between tangibility in service quality and students' satisfaction	tangibility in service quality has a significant positive relationship with students' satisfaction	Accepted
H1. b	There is a significant positive relationship between reliability in service quality and students' satisfaction	Reliability in service quality has a significant positive relationship with students' satisfaction	Accepted
H1.c	There is a significant positive relationship between responsiveness in service quality and students' satisfaction	Responsiveness in service quality has a significant positive relationship with students' satisfaction	Accepted
H1. d	There is a significant positive relationship between assurance in service quality and students' satisfaction	Assurance in service quality has a significant positive relationship with students' satisfaction	Accepted
H1. e	There is a significant positive relationship between empathy in service quality and students' satisfaction	Empathy in service quality has a significant positive relationship with students' satisfaction	Accepted

H2	There is a significant positive relationship between service quality dimensions and students' loyalty	Service quality dimensions have a significant positive relationship with students' loyalty	Accepted
H3	There is a significant positive relationship between students' satisfaction and students' loyalty	Students' satisfaction has a significant positive relationship with students' loyalty	Accepted
H4	Gender moderates the relationship between students' satisfaction and students' loyalty	Gender does not moderate the relationship between students' satisfaction and students' loyalty, since gender has an insignificant impact on this relationship.	Rejected

Chapter Five
Conclusions and Recommendations

This section summarizes the most significant findings of the study. This is followed by recommendations and implementations. This chapter ends by presenting the study's limitations and highlighting directions for future studies.

5.1 Discussion and Conclusions

From a review of literature and dependence on Parasuraman's SERVQUAL model, this study has developed a conceptual framework which seeks to examine the relationship between attributes of service quality (tangibility, empathy, assurance, responsiveness, and reliability) as IDV with students' satisfaction as a mediator and students' loyalty as DV by using the gender as a moderator. The study has used an online survey tool to reach the maximum number of students through shared the URL link of the questionnaire via WhatsApp and students' emails and collected 305 respondents. This study used the SPSS program to analyze the collected data as well as to examine the study hypotheses to draw a number of results presented below:

Firstly, the study finds that service quality tangibles have a strong significant and positive effect on satisfaction of students. The results are consistent with the previous findings by Hasan et al.,(2009), Jiewanto et al. (2012), and Saleem et al. (2017) which have shown that there is a positive relationship between tangibility and students' satisfaction.

Secondly, the study finds that service quality reliability has a strong significant and also a positive impact on students' satisfaction. The findings are in line with previous results by Hasan et al.,(2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017) which also found that the reliability is positively related to satisfaction of students in their studies.

Thirdly, the study finds that service quality responsiveness has a strong significant positive influence on students' satisfaction. The outcomes are also in accordance with the previous findings by Hasan et al.,(2009), Jiewanto et al.

(2012), Mwiya et al. (2017), and Saleem et al. (2017) in which they found a positive relationship between responsiveness and the satisfaction of students.

Fourthly, the study finds that service quality assurance has a strong significant positive influence on the satisfaction of students. This is also consistent with previous studies by Hasan et al.,(2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017) in which they also conclude a positive relationship between both variables assurance and students' satisfaction.

Fifthly, the study finds that service quality empathy has a strong significant positive influence on students' satisfaction. The outputs are in accordance with the previous studies by Hasan et al.,(2009), Jiewanto et al. (2012), Mwiya et al. (2017), and Saleem et al. (2017) which illustrated a positive relationship between empathy and satisfaction of students.

Sixthly, the study finds that the overall attributes of service quality (tangibles, empathy, responsiveness, assurance, and reliability) have a significant positive impact on students' satisfaction. The outputs are also in line with the previous findings by Hasan et al.,(2009), Jiewanto, Laurens, & Nelloh (2012), Chandra et al. (2018), Auka (2012), Kundi et al. (2014), and Saleem et al. (2017) in which they defined a positive correlation between service quality factors and the satisfaction of students. Moreover, the service quality factors (assurance, reliability, and empathy) are more significant and positively related to students' satisfaction.

Seventhly, the study finds that the overall characteristics of service quality (tangibles, assurance, empathy, reliability, and responsiveness) have a positive significant impact on students' loyalty. These outputs are also consistent with the previous findings by Auka, (2012) and Kundi et al. (2014) in which they found that there is a positive relationship between overall service quality and students' loyalty. On the other hand, these outputs are not in line with other studies which identified the quality of service as it has no impact on the loyalty of students (Chandra et al., 2018).

Eighthly, the study finds that students' satisfaction has a strong significant positive impact on students' loyalty. The outcome here is in agreement with the previous findings by Auka, (2012), Kundi et al. (2014), Mwiya et al. (2017), and Chandra et al. (2018) which outlined that the students' satisfaction is connected positively with students' loyalty too.

Moreover, this study finds that students' satisfaction plays a mediator role between service quality factors and students' loyalty. The results indicate that there is a strong significant positive indirect effect on the relationship between service quality attributes and students' loyalty. On the other hand, there is a weak significant of positive direct effect between service quality dimensions and students' loyalty.

Ninthly, the study examined the hypothesis that assumes gender plays a moderator role between the satisfaction of students as well as the loyalty of students. The study found that gender has an insignificant impact on the relationship between students' satisfaction and students' loyalty. Accordingly, the study rejects the hypothesis which assumed that gender is a moderator variable between the satisfaction and loyalty of students.

Finally, this dissertation considers that the five-service quality constructs (empathy, responsiveness, assurance, reliability, and tangibility), as well as the total service quality, are related significantly and positively to the satisfaction of students. More precisely, the study indicates that reliability and empathy attributes have the most substantial relationship with students' satisfaction and are followed in order by responsiveness, assurance, and tangibility.

5.2   Recommendations

This study focused on the service quality dimensions in HEIs of Oman and how-to attain students' satisfaction and loyalty. Conclusively, it finds that the service quality attributes have a significant positive relationship with satisfaction of students as well as with their loyalty, however, gender has no significant effect as a moderator between students' satisfaction and students' loyalty.

This dissertation has provided empirical evidence that allows decision-makers in HEIs in Oman to concentrate more on how students view the service quality and the effect of the quality of service on attracting and keeping students by increasing their satisfaction and loyalty. The research findings also provide new insights into the dimensions of service quality in Oman's HEIs to make students more satisfied and loyal to their institutions.

Drawn from the outputs and conclusions of this dissertation, top management, and decision-makers of HEIs in Oman are advised to:

A. The decision-makers of HEIs are advised to expand the scope of service quality enhancement to include the satisfaction of students as the very next indicator affecting the loyalty of students.

B. For long-term revenue generation, HEIs' decision-makers are advised to enhance overall service quality dimensions.

C. Enhancement of service quality dimensions would help decision-makers in formulating and improving the strategies and policies of their institutions which lead to a better reputation and more competitive advantage.

D. This study allows policymakers to understand the value of service quality and its effect on the satisfaction and loyalty of students in HEIs in Oman in order to increase the quality of education and achieve maximum returns which lead to strengthening Oman's educational budgets.

E. HEI decision-makers are urged to track, develop and enhance service quality characteristics as a whole, contributing to a higher level of student satisfaction and providing students with a greater chance of pursuing further studies at the same university, as well as endorsing and engaging their families, friends and employers in a positive word of mouth.

F. The decision-makers of HEIs are directed to develop the employees' communication skills and to create effective dimensions of service quality to improve students' theoretical and practical skills.

G. This study allows decision-makers to understand the significance of the quality of service and its effect on the satisfaction and loyalty of students, which lead to enhancing the quality of HEI education and accreditation in Oman locally and internationally and gain more competitive advantages.

H. The establishment of service quality standards at HEIs by the International Organization for Standardization (ISO) could encourage continuous improvements to formulate a service quality strategy and enhance the satisfaction of students. This study therefore suggests that the decision-makers of HEIs to introduce in their organizations the ISO certificate and quality assurance as one of the ways to improve the quality of service.

I. Decision-makers at HEIs are urged to pay particular attention to infrastructure improvement and other associated facilities in order to meet international education requirements.

J. HEI decision-makers are encouraged to pay special attention to enhancing the institution's tangible dimension by improving the service quality of the institution's physical appearance, such as buildings, infrastructure, furniture, and appearance of attractive and stylish employees of the institution. The institution should also have suitable and up-to-date facilities, courses, labs, and workshops…etc.

K. The decision-makers of HEIs are suggested to pay careful attention to strengthening the institution's reliability factor by providing students with services as promised and from the beginning in the right way. The organization also needs to properly track documents such as the outcomes of students and other personal details. In addition, expanding the use of reliable new tools such as new technical systems, interviews, observations, and records in student data collection and analysis to enhance the reliability of the respondents.

L. HEI's decision-makers are urged to pay more attention to improve the institution's responsiveness dimension by providing students with prompt service and readiness to respond to inquiries. The staff are also encouraged to pay more attention to the 'students emails; for any inquiry needs'. Prompt replying to phone calls and face-to-face contact is needed too.

M. HEI's decision-makers are expected to pay more attention to enhancing the institution's assurance factor by inspiring students with confidence and trust. The organization is also recommended to strengthen the employees' competence and courtesy by hiring qualified employees.

N. The decision-makers of HEIs are recommended to pay more attention to consider the empathy dimension by educating staff to take care of the students and personally pay more attention to them. The institution as a whole also must

take care of the students and give greater attention to them through updating the institution's strategies, policies, and procedures related.

O. The study finds that reliability, empathy, and responsiveness are the top three main drivers for enhancing the satisfaction of students, attracting and keeping students, as well as contributing to their confidence and loyalty. The decision-makers of HEIs are therefore urged to concentrate more on these dimensions.

5.3 Implications for Theory

The main purpose of this dissertation is to gain a better understanding of the level of service quality and the extent of its impact on student satisfaction and loyalty at HEIs in Oman. To achieve the goal of this study and answering the related questions; the conceptual framework has been developed and collected data was analyzed to test the study's hypotheses.

In general, this study enhances understanding of the impact of service quality on the satisfaction and loyalty of students by studying the impact of five attributes of service quality in the educational field.

More specifically, this study encourages Oman researchers to study the impact of service quality on HEIs in Oman due to the lack of studies on this topic.

5.4 Limitations and Future Studies

This research aims to discuss the effect of aspects of service quality on the satisfaction and loyalty of students. Similar to other studies, this study has some limitations:

The first limitation is related to the sample size and data collection method. The study has collected 305 respondents from five HEIs by using a convenience sample procedure. Future research can therefore provide broader samples to help comprehend the effect of service quality on students' satisfaction in HEIs. Future studies could also apply a more proper representative sampling structure.

The second limitation is the geographic area of samples. The population samples of this study are collected from a narrow geographic area in Oman exactly from five HEIs which are located on Governorates of Ash Sharqiyah North and South

in Oman (A 'Sharqiyah University, Ibra College of Technology, Sur University College, College of Applied Sciences-Sur, and Oman College of Health Science-North Sharqiyah Branch). To get better representative results for HEIs in Oman; future studies can collect samples from a broad geographical region and cover more HEIs.

The third limitation is the population sample element. The study considers only one of the stakeholders that is a student and omits other stakeholders like government, other universities, and colleges, ministries, employees (academic, non-academic staff), parents, suppliers, etc. Therefore, future studies can also widen their study scope to include other stakeholders in order to get a better picture.

The number of variables is the fourth constraint. This research studied the connection between the quality of service and the satisfaction and loyalty of students. Future studies can therefore cover the effect of service quality on HEIs from multidimensional models that involve more variables such as motivation, access, investment, and performance.

The fifth limitation is the measurement methods, this research applied the SERVQUAL model to measure the influence of attributes of service quality that are recommended to be used in the education field, but other techniques specifically measure the effect of service quality on the academic field. Therefore, future studies can use other service quality assessment instruments alongside the SERVQUAL model.

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Appendix (I): Questionnaire

Dynamics of Service Quality and Students Loyalty: Evidence from Higher Education Institutions in Oman

فعالية جودة الخدمة والولاء الطلابي: نماذج من مؤسسات التعليم العالي في عُمان

Dear student

Thank you for your willingness to participate in this study which aims to study the relationship between Service Quality and Students Loyalty in HEIs in Oman. This research is part of my Master of Business Administration Degree at ASU University. Completing the questionnaire will take about 5 minutes. The answers you provide are not wrong or correct, and they should reflect your perceptions about your institution. Your answer will be processed anonymously and confidentially.

 Thank you for taking the time to complete this survey. Your responses will be used to improve the service quality in HEIs in Oman. We look forward to hearing from you.

عزيزي الطالب / عزيزتي الطالبة

شكرًا لرغبتك في المشاركة في هذه الدراسة التي تهدف إلى دراسة العلاقة بين جودة الخدمة وولاء الطلاب في مؤسسات التعليم العالي في سلطنة عمان. هذا البحث جزء من دراستي لدرجة الماجستير في إدارة الأعمال بجامعة الشرقية. سيستغرق ملء الاستبيان حوالي 5 دقائق. الإجابات التي تقدمها ليست خاطئة أو صحيحة , وينبغي أن تعكس تصوراتك حول مؤسستك. ستتم معالجة إجابتك بشكل مجهول وسري.

شكرا لأخذ الوقت لاستكمال هذا الاستبيان. سيتم استخدام إجاباتك لتحسين جودة الخدمة في مؤسسات التعليم العالي في سلطنة عمان. نحن نتطلع الى الاستماع منك.

البيانت الشخصية	**Personal Demographics**

- الجنس – Gender:

        ذكر - Male □

        أنثى - Female □

- Age - العمر بالسنوات:

    [   ]

- Your Education Institution - مؤسستك التعليمية:

    □ A 'Sharqiyah University - جامعة الشرقية

    □ Ibra College of Technology – الكلية التقنية بإبراء

    □ Sur University College - كلية صور الجامعية

    □ College of Applied Sciences, Sur - صور – كلية العلوم التطبيقية

    □ Oman College of Health Science, North Sharqiyah Branch – كلية عمان للعلوم

    الصحية فرع شمال الشرقية

- Education Level – المستوى التعليمي:

    ماجستير Master □

    بكالوريوس Bachelor □

    دبلوم Diploma □

    Other - أخرى □

- Academic Year – السنة الأكاديمية:

    □1   □2   □3   □4   Other - أخرى □

Please indicate the degree to which you agree or disagree with each of the following statements as shown in the survey scale يرجى الإشارة إلى درجة موافقتك أو عدم موافقتك على كل عبارة من العبارات التالية حسب الموضح بمقياس المسح.

Survey Scale: مقياس الاستبانة				
1	2	3	4	5
Strongly Disagree غير موافق بشدة	Disagree غير موافق	Neutral محايد	Agree موافق	Strongly Agree موافق بشدة

Items: العناصر	Survey Scale مقياس الإستبانة				
	1	2	3	4	5
1. Service Quality Dimensions : أبعاد الجودة في الخدمة					
1.a Tangibility : الملموسية					
My institution has physical facilities (e.g. buildings and furniture) that are attractive and stylish يوجد بمؤسستي مرافق جذابة وأنيقة مثل المباني والأثاث					
My institution has Sufficiency of academic equipment, e.g. laboratories, workshops تمتلك مؤسستي الأجهزة والمعدات التي تحتاجها العملية الأكاديمية					
My institution has up to date equipment مؤسستي تمتلك أحدث الأجهزة					
My institution has ease of access to data base, e.g. books, journals, software, information networks تتمتع مؤسستي بسهولة الوصول إلى قواعد البيانات، كالكتب والمجلات والبرمجيات وشبكات المعلومات					
1.b Reliability: الضمان					
My institution provides services as promised					

تفي مؤسستي بوعدها عند تقديم الخدمات					
When the students have problems, the employees of my institution are sympathetic and reassuring موظفو مؤسستي يطمئنون الطلاب عند مواجهتهم المشاكل					
My institution provides the service correctly the first time تقدم مؤسستي الخدمة بشكل صحيح من المرة الأولى					
My institution documents its records accurately (e.g. students' results) توثق مؤسستي عملياتها بشكل دقيق (مثل نتائج الطلاب)					
1.c Responsiveness: الإستجابة					
My institution informs students exactly when services will be performed تعلم مؤسستي الطلاب بالتحديد بموعد تقديم الخدمات					
My institution gives prompt service to students تقدم مؤسستي خدمة سريعة للطلاب					
Employees at my institution are willing to help students موظفو مؤسستي مستعدون لمساعدة الطلاب					
Employees at my institution are ready to respond to student's request موظفو مؤسستي مستعدون للرد على طلب الطالب					
1.d Assurance: الإعتمادية					
Employees of my institution can be trusted أثق بموظفي مؤسستي					
Students feel safe when dealing with the institution's employees يشعر الطلاب بالأمان عند التعامل مع موظفي المؤسسة					
Employees at my institution inspire confidence موظفو مؤسستي يلهمون الثقة					

Employees of my institution are polite موظفو مؤسستي يتمتعون بالأدب الرفيع					
1.e Empathy: التعاطف					
Lecturers give students individual attention يعطي المحاضرون الطلاب اهتمامًا شخصيًا					
My institution's employees know students' needs موظفو مؤسستي يعرفون احتياجات الطلاب					
My institution's employees are easily accessible to students يصل الطلاب بسهولة للموظفين					
My institution has students' best interests at heart تضع مؤسستي مصالح الطلاب نصب أعينها					
2. Student Satisfaction: رضا الطلاب					
I am satisfied with the overall quality of services being provided by my institution أشعر بالرضى عن جودة الخدمة التي تقدمها مؤسستي					
I am satisfied with the decision to study in my institution أشعر بالرضى عن قرار الدراسة في مؤسستي					
My institution meets my expectations مؤسستي تلبي توقعاتي					
I am extremely satisfied with my institution أنا مرتاح للغاية لمؤسستي					
3. Student loyalty: ولاء الطلاب					
I am feeling proud to be associated with my institution أشعر بالفخر لكوني مرتبطًا بمؤسستي					

I'd recommend my institution to friends and family members سأوصي بمؤسستي للأصدقاء وأفراد الأسرة				
I will write a positive impression of my institution in social media سأكتب انطباعًا إيجابيًا عن مؤسستي في وسائل التواصل الاجتماعي				
I prefer to pursue my higher studies in the same institution أفضل متابعة دراستي العليا في نفس المؤسسة				

Any other comments?

أي تعليقات أخرى؟

………

………

Please do not hesitate to contact us via the email below if you have any questions or inquiries about the above questionnaire: Email: sa9144@gmail.com

الرجاء عدم التردد في الاتصال بنا من خلال البريد الإلكتروني أدناه في حالة وجود أي أسئلة أو استفسارات حول الاستبيان أعلاه.

البريد الإلكتروني : sa9144@gmail.com

Thank You for your Kind Cooperation.

شكرا لتعاونكم