



**NEAR EAST UNIVERSITY**  
**INSTITUTE OF GRADUATE STUDIES**  
**BUSINESS ADMINISTRATION PROGRAM**

**THE IMPACT OF SERVICE QUALITY AND REPUTATION ON  
SATISFACTION WITHIN HIGHER EDUCATION INSTITUTION AND  
ITS IMPLEMENTATION TO LOCAL AUTHORITY**

**PhD THESIS**

**JAZA HAMA TOFIQ BAWAIS**

**Nicosia**  
**JUNE, 2022**

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**THESIS SUPERVISOR**  
**ASSOC PROFESSOR DR AHMET ERTUGAN**

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### Approval

We as the jury members certify the ‘**THE IMPACT OF SERVICE QUALITY AND REPUTATION ON SATISFACTION WITHIN HIGHER EDUCATION INSTITUTION AND ITS IMPLEMENTATION TO LOCAL AUTHORITY**’ prepared by Jaza Hama Tofiq Bawais defended on 15./07/2022 has been found satisfactory for the award of degree of Master / Phd

Examining Committee	Name-Surname	Signature
Head of the Committee:	Assoc Prof Dr Behiye Çavuşoğlu	.....
Committee Member*:	Prof. Dr Harun Şeşen	.....
Committee Member*:	Prof Dr Tarık Atan	.....
Committee Member*:	Asst Prof Dr Ayşe Gözde Koyuncu	.....
Supervisor:	Assoc Prof Dr Ahmet Ertugan	.....

Approved by the Head of the Department

...../...../20...

.....

Department of Business Administration

Approved by the Institute of Graduate Studies

...../...../20...

Prof. Dr. Kemal Hüsnü Can Başer

Head of the Institute

## **Declaration**

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

Jaza hama tofiq bawais  
...../...../.....

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JAZA HAMA TOFIQ BAWAIS

## **Abstract**

### **The Impact Of Service Quality And Reputation On Satisfaction Within Higher Education Institution And Its Implementation To Local Authority**

**Jaza Hama Tofiq Bawais**

**Business Administration Program**

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This thesis is about the service quality idea related with the quality of higher education and implementation by Local Authority in Sulaimanyah province .The main focus of the reform process really by the higher education and enforcement to Local authority in Sulaimanyah province. Organizational reform has involved attempts to improve academic quality and administration processes in universities, technical institutions and colleges. The fundamental point of this thesis is to give keys necessary for the procedure of setting up an establishment the quality of higher education and enforcement Local authority in Sulaimanyah province This thesis the current strategic administration is to see whether it is significant in the of quality assurance in higher education Sulaimanyah province. The research methodology of this thesis is a mixed collection of literature based research about by introducing the ideas and structures which to a degree might be suitable to The higher education business environment, Sulaimanyah province contextual investigation (the thesis will display are ( KNOWLEDGE GAP MANAGEMENT) analysis based on Sulaimanyah).. The thesis exhibits the basic ideas of quality, in higher education and implementation to local authorityin Sulaimanyah of internal and external environment analysis and strategy filtering The thesis infers that despite the fact that constrained by the literature accessible and the degree of the thesis, it gives an introduction to the strategic instruments accessible to the quality of higher education and implementation to local authorityarea in Sulaimanyah province.

**Keywords:**Service quality – Satisfaction - reputation - Higher education - Sulaimanyah province

## ÖZ

### **Hizmet Kalitesi ve İtibarının Yükseköğretim Kurumlarında Memnuniyete Etkisi ve Yerel Yönetime Uygulanması**

**Jaza Hama Tofiq Bawais**

**İşletme Yönetim Programı**

**07.2022, 108 sayfa**

Bu tez, Süleymaniye ilindeki Yerel Yönetim tarafından yükseköğretimin kalitesi ve uygulanması ile ilgili hizmet kalitesi fikri hakkındadır. Reform sürecinin ana odağı, gerçekten yüksek öğretim ve Süleymanyah eyaletindeki Yerel otoriteye uygulama tarafından yapılmıştır. Örgütsel reform, üniversitelerde, teknik kurumlarda ve kolejlerde akademik kaliteyi ve yönetim süreçlerini iyileştirme girişimlerini içermektedir. Bu tezin temel noktası, bir kuruluş kurma prosedürü için gerekli anahtarları vermektir, yüksek öğrenim kalitesi ve yaptırımı Süleymanya vilayetindeki yerel otorite Bu tez, mevcut stratejik yönetimde kalite güvencesinin önemli olup olmadığını görmektir. yüksek öğrenim Süleymaniye eyaleti. Bu tezin araştırma metodolojisi, yüksek öğrenim iş ortamına bir dereceye kadar uygun olabilecek fikirleri ve yapıları tanıtarak, Süleymaniye ili bağlamsal incelemesi hakkında literatüre dayalı araştırmaların karma bir koleksiyonudur (tezde gösterilecektir ( BİLGİ FARK YÖNETİMİ) Süleymaniye'ye dayalı analiz).. Tez, yüksek öğretimde kalite ve iç ve dış çevre analizi ve strateji filtrelemenin Süleymaniye'deki yerel otoritelere uygulanmasına ilişkin temel fikirleri sergilemektedir. Tezin konusu, Süleymanyah ilindeki yerel yönetim alanına yüksek öğretim ve uygulama kalitesi için erişilebilir stratejik araçlara bir giriş sağlar.

**Anahtar Kelimeler:**Hizmet kalitesi - Memnuniyet - itibar - Yüksek öğrenim - Süleymaniye ili

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### **Abbreviations**

**(HEI)** Higher Educational Institutions

**(SQ)** Service Quality

**(EU)** European Union

**(USA)** United States of America

## **CHAPTER I**

### **Introduction**

This chapter presents the background of the study, problems statement, aim of the study as well as research questions to be answered by the current research.

#### **1.1 Background of the study**

The concept of quality of service in educational activity has its basis within the study of service sciences, with the understanding that value may be a co-creation between the provider and the receiver (which within the educational activity context referred to as students) (Maglio & Spohrer, 2008; Ng & Forbes, 2009; Schneider & Bowen, 2010; Vargo & Lusch, 2008b)

Also, quality in educational activity implies the persistent improvement and effective execution of higher education organizations to gain the HEI alumni network's trust, which is perceived internationally as an instrument of an appraisal. Higher education's character can be a distinguishing factor amongst the most imperative and pertinent factors for the advancement of a national instruction framework.

The involvement of Higher Education Institutions (HEIs) with the globalization phenomenon, which is primarily economic and transactional, is perceptible (Croucher & Woelert, 2016; Tan et al., 2016; Spring, 2008; Yang, 2007; Marginson & Wende, 2007; Kwiek, 2001; Kadhimi et al., 2020; Khatab et al., 2020a). With the rise of the global knowledge-based economy, globalization has led to a major shift in the landscape and functions of HEIs around the world, albeit with business-alike ideas embedded in their operations and management (Croucher & Woelert, 2016; Khatab et al., 2020b; Marginson & Wende, 2007; Lin et al., 2020). Advocators of corporate, business and service-oriented ideas believe that such a shift is quintessential to the neo-liberal movement that forces HEIs to adopt these methods to survive and keep up with the competitive environment in a rapidly changing world (Othman et al., 2020a; Yang, 2007).

This definition of service quality within HE is rooted in the study of service sciences and service systems, taking into account that value is a co-creation between the

provider and the consumer based on the profit of the latter, which refers to student and academic staff in HE settings (Schneider & Bowen, 2010; Ng & Forbes, 2009; Vargo & Lusch, 2008). According to Ng & Forbes (2009); Quinn et al. (2009), as HE is known as a service delivered by HEIs, HEIs naturally aim to be service-oriented and act as business bodies with market and service performance management orientations. For HEIs, evaluating and improving their service efficiency-that is their service quality becomes evident, prevalent, and increasingly necessary. This is to maintain sustainable businesslike models that, through attracting and retaining learners, grow their tuition-based revenues (Othman et al., 2020b; Angell et al., 2008). Due to the increasing student and academic staff recruitment, demands, and aspirations, the need for HEIs to measure and enhance the standard of service is expected, resulting in the increasing trend of public-private tuition cost-sharing among HEIs worldwide.

In leveraging the diverse effects of science and innovation, there is now fierce rivalry. At the same time, universities are expected to provide high-quality, market-relevant, and leading-edge educational services. From the 2010s to 2018s, Northern of Iraq which represented in Kurdistan Regional of Iraq spent 2-3 billion dinars annually to send 2000 – 4000 student and academic staffs overseas. To minimize foreign exchange expenses incurred by sending nearly 4000 student and academic staff to higher education abroad, they intended to transform the area into a Center of Academic Excellence. Jongerden (2019) further stressed the aspiration of the regional government to create the region as a center of academic excellence: "The Ministry of Higher Education was established in 1991 to make this regional (Kurdistan Regional) a center of educational excellence." To achieve this, it needs to focus on strong research, effective leadership and management, and impeccable academic standards." To achieve excellence in service quality and customer satisfaction, higher educational institutions that follow quality culture as their ideology would aspire. Most universities have a quality department to handle quality management systems in the current regional higher education setting, and where competition in the higher education sector is growing, universities are forced to take a student and academic staff's perspective on the quality of services offered. In the higher education context, the quality of the academic product was historically the key priority, but now there is an increased interest in assessing the quality of service in higher education (Shaikhly, 2017).

As a case in the current study, the key reason for selecting Sulaimanyah city in northern Iraq was that HE was first born in this city with a drastic increase in HEIs due to the increase in demand for public education services in that area. Within the city of Sulaymaniyah, there are two public universities, seven public colleges, nine private universities, and eight private institutions. Owing to the improvements in the infrastructure of the general population concerning the modifications in the system of the general public, the HE framework has seen drastic changes over the past decade. The cultural tapestry across Iraq and the nullification of the standing framework in education have affected the quality and training structure since the quality of service has received much attention especially in higher education as well as in the service industry such as banking, hotel, and insurance in Iraq generally, and in northern Iraq particularly, more specifically in Sulaymaniyah city (Jongerden, 2019). One method of measuring service quality is by comparing the difference between perceived service and expected service.

The primary aim of this paper was to obtain a better understanding of the real role that can be played by a group of dimensions of service quality towards achieving customer satisfaction which is represented in the student and academic staff in higher education institutions in the city of Sulaymaniyah in northern Iraq, and thus the ability to fill for the gap in the literature regarding the important role that these dimensions play in achieving satisfaction at the local authority of HE in this city. Thus, numerical data were gathered from participants about the service quality of HEIs in Sulaimanyah city of northern Iraq. This report concluded that a comprehensive study should be conducted, taking into account the literature review and its goals and objectives. The questionnaires were distributed among a selected group of student and academic staff from a variety of HEIs, taking into account constraints such as monetary resources and time. According to the Ministry of Planning (2013), higher education plays an important role in teaching, learning, and research for the benefit of the public. In the region of northern Iraq, some of the driving forces toward achieving quality education are the National Education Policy and Vision 2020. Education and training are essential to this region of Iraq's Vision 2020 program and have been given priority status by this region of the government. Extensive resources have been allocated to the public sector to ensure that this region of northern Iraq's population receives the best possible training, especially in the field of science and technology, and the government of this region aims to export its educational offerings in the future. The government of this region is fully committed to building a world-class

educational system that is flexible and innovative, one that will enhance the Region's role as a hub for education, research, and development in Iraq particularly and in the Middle East generally.

Therefore, an extensive analysis of previous research results was carried out to ensure that the sampling chosen for this study will allow the generalization of the findings. This is to obtain a wider understanding of the factors that lead to increasing student and academic staff satisfaction with the quality of service. The research adopts the HEdPERF version and tests the level of service following five-dimensional interface variables (Abdullah, 2005). Sulaymaniyah city has multicultural surroundings of scholars and student and academic staffs and professional persons with various cultural backgrounds. The main reason for this was as a result of the difficult security conditions that faced many areas of the center and south of Iraq, in addition to the security conditions that beset some neighboring countries such as Syria, this has led to the migration of many academic and professional persons to the cities of northern Iraq, including Sulaimanyah city. Therefore, their experiences and aspirations of SERVQUAL are distinctive. With the diverse profile of academic staff and student and academic staff, numerous cultural and educational changes have taken place in the Sulaimanyah district, leading to the need for improvement in many sectors.

Therefore, to obtain accurate results, SERVPERF, a methodology introduced to conduct a gap analysis of the performance of the service quality of a company against the quality of customer service needs, has been replaced by SERVQUAL, a multi-dimensional research tool designed to deduce the perceptions and service preferences of the customer across five dimensions (reliability, tangibles, responsiveness, a multi-dimensional research tool. Because of the significance of the above, the current study attempted to confirm and gain a better understanding of the relationship between the overall dimensions of service quality and student and academic staff satisfaction in HEIs operating in Sulaimanyah to fill the gap in the literature on the important role these dimensions can play in achieving the requisite satisfaction for the service. Thus, the following part of this paper moves on to a literature review related to the current study variables.



## **1.2 Statement of the Problem**

The reality of applying the service quality of higher education at the essential stage in Sulaymaniyah province. The critical role of strategic management and planning as a valuable management instrument in reinforcing organizational performance has received substantial interest from the public sector administration literature. In the current business landscape and for the sake of advancement, developing a way to make terrific thoughts and plans for what is to come has become a pressing administrative concern. An administration's pivotal capacity is significant because it identifies with a sister government organization that is promptly concerned with employing decisive essential leadership and methodical approaches. This will, for example, help in implementing change in bureaucratic linkages at the open organizations.

In a situation of low revenues, political crisis, and increasing welfare needs, the requirement for future planning that may strategically reposition the regime on the trail of sustainable development is essential. This is a significant endeavor that this research seeks to address. Therefore, it is imperative to review how strategic management may be adopted in governance to enhance performance in government areas. The advent of a strategic management team requires much searching, discussion, and assessment of diverse stakeholders' expertise responsible for future planning. However, it is well-known that the advent of the strategic plan and higher education quality in Sulaimanyah is less complicated than the implementation.

## **1.3 Purpose of the Study**

The study's purpose is to experimentally examine the connection between service quality and student/academic staff satisfaction and acknowledge the significant effect of service quality on student and academic staff satisfaction at educational institutions in Iraq. The study further aims to review the gaps in the predicted and added service of the education faculties and control institutes to seek out Sulaimanyah excellence inside the final satisfaction of the scholars and academic staff of the education faculties and management institutes about the exceptional service supplied by their institute. The thesis critically examines a variety of leading research on satisfaction, service quality, and better training. The study is delimited to the relevant antecedents, dimensions, and outcomes of Higher Education institutions (HEI) providers inside.

#### **1.4 Research Questions**

1. How does nature of service impact higher education learning results, and what job does understudy fulfillment and the nature of understudy encounter play in this relationship?
2. What are the limits of student and academic staff responsibilities and how can they participate in the process of the quality of higher education?

#### **1.5 Significance of the Study**

This study may obtain a new proof of student and academic satisfaction anticipated to impact educational institutions' service quality in Sulaymaniyah, Iraq. Moreover, this study may supply adequate knowledge and input on service and educational activity satisfaction from a Sulaimanyah perspective. Meanwhile, preliminary studies in Sulaimanyah measure the impact of service quality on academic and student satisfaction. Hence, this study aims to fill the gap by discussing the association and influences of service quality and satisfaction.

## **CHAPTER II**

### **Literature Review**

The literature review does not seek research findings on the problem issue. It is only the definition of the concepts used in the study model. This chapter represents the theoretical framework and review of the related research with the current research.

#### **2.1 Theoretical Framework**

Teaching in Sulaimanyah was first initiated in 1968 when there was only one university, named Sulaimanyah University of Iraq. This university had three faculties. In 1981, the previous Iraqi regime transferred this educational university's foundation to the Erbil province and changed its name to University Salahaddin. However, in 1992, the University of Sulaimanyah was reestablished by the Kurdish intellectuals and teachers' massive efforts. It was formally reopened in November of 1992. Through the years that followed, the university's figure grew dramatically due to the growing demands of higher education within the town. For instance, currently, there are several non-public and public universities and technical institutes of higher education in Sulaimanyah province, including two public universities and seven public institutes and nine non-public universities, and three non-public institutes. The higher education framework has seen emotional changes given the changes within the overall public structure. The cancelation of the standing framework, cross-country, and cross-culture impacts have affected our qualities and coaching framework. The full universities that have been registered in Google Scholar Citation area unit (5804) over the planet. Consistent with their criteria, universities having over (1000) citations will be added to the system, so twenty-eight universities in Al-Iraq have this chance to be listed in it. Eleven Universities are in this thirty-four university area unit in Kurdistan, and Cihan University is ranked the highest. Cihan University- Erbil is one of the Al-Iraqi universities ranked (2941) within the universe ranking and is ranked number 2 in Iraq whereas the 1st in Northern Iraq.

In instruction, a top-quality management framework is a perceived internal control customarily created instruction in Sulaimanyah by executing instructive organizations in government-funded coaching. However, more effort colleges to confront intense

group action In light of the instructive frameworks forced assets and, therefore, the requests (Al-Zawawi, Khalid, 2003). The higher education in Sulaimanyah is used to line the character a coordinated system to instructive improvement quality coaching and incorporated into it (6) bunches are:

- The university authority: addresses the high organization, activity and affiliation, organized commitment, and citizenship.
- Information and examination: Information of the board, information affiliation, and examination are added measurements of faculty accomplishment, Operational masterminding and key organizing program key progression, approach improvement.
- Management and improvement of time unit require: masterminding and organizing of the hands, and therefore the operating course of action of the affiliation teaching the headway of the indicating workers, and therefore the master satisfaction of the coaching workers.
- Instructive Administration style, support, and transport of the informative system. The arrangement of informational analysis, the improvement of undergraduate choice and enrollment of the officers, and the chance of instructional organization as a business enterprise activity.
- Schools use it to find out the G.E. ways and increase an organization's productivity (Clarke, G. (1997). Opportunities of the external environment, and resultant distinction the company's competencies and main success factors, execution and delayed consequences of labor Princess: Student
- Results, faculty air, and climate improvement, faculty, and results, investigate at school execution, contemplate the execution of colleges as a cash connected activity.
- Undergraduates and loan specialists' satisfaction of the enlightening system family: wants of gift and future undergraduates and association between the informative structure and preparing the system. Therefore, the satisfaction affiliate of undergraduates and operators of the system with varied colleges or different informational structures. The method of reasoning for applying for quality and accreditation in education establishments.

Satisfaction Student and academic staff represent the building block of organizational effort and a key to its success and survival Bucak (2014) as it is incredible for companies to grow up if they ignore or disregard the needs of customers (Bucak, 2014).

The previous research defined satisfaction student and academic staff as an overall evaluation based on the total purchase and consumption experience with the good or service over time Fornell et al., (1996) and has the potential to predict the future customer behavior (Hill, 2008). It was acknowledged that satisfied customers usually rebound and buy more as well as work as a network to reach other potential customers by sharing experiences (Paul and Nick, 2016). Prior research has acknowledged that there is a relationship with nature between satisfaction and loyalty.

In addition, many researchers have assumed that satisfaction student and academic staff is the dependent variable that might change the customers, whether they will become loyal or not (Bennett and Rundle-Thiele, 2004; Hennig-Thurau, & Klee, 1997; Singh, 2006). Verma, Yogesh, and Singh (2017) pointed out that there is a lack of research in investigating the relationship among marketing mix, satisfaction student and academic staff, and loyalty. Srinuan, Srinuan, and Bohlin (2014) analyzed the impact of different pricing strategies on the satisfaction of student and academic staff in the telecom market of Thailand. It was observed that highly complex plans in terms of pricing may lead to confusion among customers. Chakraborty and Sengupta (2014) proposed a model of satisfaction for students and academic staff in the telecom industry which focuses on quality, value, and price and are found as significant factors in determining satisfaction of students and academic staff. The conceptualization of satisfaction students and academic staff was explained in various ways to suit the context of the research undertaking. Applying the right concept of satisfaction to students and academic staff is vital to avoid any distraction of performance results or outcomes from the customer target group. Most of the definitions of satisfaction student and academic staff in the literature were process-based which involved evaluation process (Akroush & Mahadin, 2019).

However, when post-purchase performance decreases below than customer's pre-purchase expectation, it will result in a negative disconfirmation that causes the customer to feel dissatisfaction (Maria, Miranda, and Breazeale, 2014). Satisfaction student and academic staff concept under the process based is reflected several attribute judgments related to a particular transaction which is known as a transaction-specific satisfaction (Koufteros *et al.* 2014; Maria *et al.* 2014). In transaction-specific satisfaction, customers make an assessment or judgment at a particular time during a service encounter or consumption situation (Koufteros *et al.* 2014). Past studies had recommended that the cumulative satisfaction concept is more consistent with

treatments of satisfaction student and academic staff in both economy psychology and welfare economics (Gustafsson, Johnson, and Roos, 2005). A study by Maria *et al.*, (2014) had confirmed that cumulative perspective is a superior forecaster of customer loyalty as well as the result of previous studies.

The major determinants of satisfaction for students and academic staff are perceived value and perceived quality. The pre-purchase expectation stage influences the customer's decision to purchase the quality of a company's product or service. According to Kotler and Armstrong (2013), expectations represent prior consumption experience and forecasts relating to the company's ability to deliver quality products and services in the future. Satisfaction with student and academic staff is determined by the extent to which products and services supplied by a company meet customer expectations. Nowadays, every organization recognizes the importance of delivering service quality which will lead to satisfaction for students and academic staff or that can meet or exceed customer expectations (Reyes, 2013).

Researchers keep exploring the antecedent and consequence of satisfaction student and academic staff that can fit in today's business undertaking (Albayrak and Caber, 2015). Therefore, the role of satisfaction student and academic staff remains a central tendency of a marketing concept for the relationship between pre-consumption and post-consumption (Minarti and Segoro, 2014). Recent research has identified satisfaction student and academic staff as an antecedent to customer loyalty (Kursunluoglu, 2014) as a satisfied customer was found to encourage customer involvement in a business process (Eisingerich, Auh, and Merlo, 2014). Acknowledging the importance to form customer's satisfaction, existing research had identified the determinants of satisfaction for instance service quality (Rajaratnam, Munikrishnan, Sharif, & Nair, 2014), perceived value (Eid and El-Gohary, 2015), the physical environment, and customer emotion (Ali and Amin, 2014). On the other hand, a study was done in the Malaysian retail banking industries by Stan *et al.*, (2013) which stated that assurance and empathy possess a great effect on the satisfaction of bank customers. More studies which had been done by Arasli, Mehtap-Smadi, and Turan Katircioglu (2005), showed that reliability has the highest influence on satisfaction student and academic staff. It also showed that reliability affects customers' satisfaction greatly. For instance, in the banking industry, (Arasli *et al.* 2005) and (Saghier and Nathan, 2013) claimed that because loyalty is related to satisfaction with student and academic staff, banks perform new effective strategies to improve the quality of service satisfaction and loyalty.

Measuring the satisfaction of student and academic staff is an evaluation process for an organization to identify customer response towards products or services, continuous improvement, added value to the business, and prospects for future growth. Generally, there are two famous types of scale applied in the measurement of satisfaction student and academic staff, a single item and multiple items. Some researchers like (Shin and Elliott, 2001), used a single item rating scale of four to seven-point to measure the overall satisfaction as a simple basis evaluation to reflect “very satisfied” to “very dissatisfied”. Most of the satisfaction student and academic staff measurements were developed to simply evaluate the global or net satisfaction with post-purchase of product and service (Shin and Elliott, 2001).

Selecting the right measurement scale for satisfaction students and academic staff is crucial in obtaining accurate results in empirical studies. There are various approaches in defining satisfaction for students and academic staff. Satisfaction student and academic staff may be defined as the satisfaction of a person’s feelings of pleasure or disappointment resulting from comparing a product or service perceived performance or outcome about his or her expectations. A study by Olorunniwo, Maxwell, and Udo (2006) has defined that combined concepts of satisfaction are of limited value and therefore should be defined as a singular measure. For this present study, the uni-variable approach was used to assess satisfaction student and academic staff, which is in line with the definition by Olorunniwo *et al.*, (2006). Emphasizing the differences between Higher Education Institutions could strengthen the Higher Education Institutions' competitive ability and raise satisfaction and customers' willingness to repeat the service Hassan, Maghsoudi, & Nasir, (2016), thus, for this study, satisfaction student and academic staff is a uni-variable.

Most of the scholars had recognized that satisfaction student and academic staff is a complex construct in nature and the application of multi-item scales is recommended to suit in a way to provide a better understanding of satisfaction from the customer perspective rather than a single item scale (Gilbert and Veloutsou, 2006). The multi-item approach enabled satisfaction to construct to be measured empirically through levels of scale reliability which is found impossible to single-item measure. Thus, multi-item measures with unidimensional variables were part of this study. Unidimensional variable explains more broadly on satisfaction student and academic staff aspects from which it may be produced the desired result through valid methodology and measurement for this study with more justifiable construct validity (Nunnally, 1975).

Regarding the satisfaction student and academic staff measurement approach, there are two approaches namely transaction-specific and cumulative satisfaction approach which are still applicable in recent studies throughout various industries. The objectives of the studies were to determine which approaches are suited to be used in the studies. However, scholars are more inclined to use multiple items scales compared to single-item scales for studies (Abkar, 2017; Jobhaarbima, 2017; Muala, 2016; Han & Hyun, 2015; Koufteros et al., 2014).

Table 1.

*The measurement of satisfaction student and academic staff used in recent years studies*

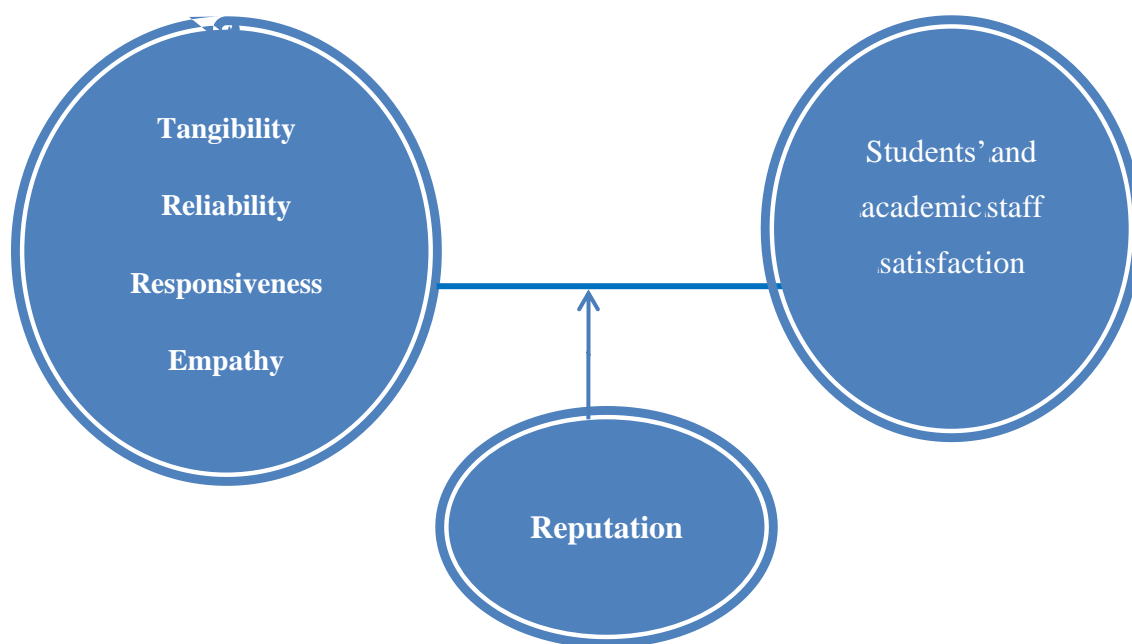
No.	Authors	Industry	Item/ dimensionality	Scales	Components
1	Abkar (2017)	Mobile	5 items Uni-dim	1: strongly disagree, 5: strongly agree	General satisfaction, affective, value
2	Jobhaarbima (2017)	Toyota Cars	4 items Uni-dim	1: strongly disagree, 5: strongly agree	General satisfaction and affective
3	Muala (2016)	Bank	5 items Uni-dim	1: strongly disagree, 5: strongly agree	General satisfaction and affective
4	Ngo and Nguyen (2016)	Bank	3 items Uni-dim	1: strongly disagree, 7: strongly agree.	overall customer satisfaction
5	De Oña et al., (2016)	Transit	3 items Uni-dim	(1-lowest level of satisfaction, 5-highest level of satisfaction)	General satisfaction
6	Albayrak & Caber (2015)	Hotel	1 item Uni-dim	1: strongly disagree, 5: strongly agree	General satisfaction
7	Han & Hyun (2015)	Medical Tourism	3 items Uni-dim	1 : Extremely disagree, 7: Extremely agree	General satisfaction, affective and cognitive
8	Akamavi et al. (2015)	Airlines	4 items Uni-dim	1: strongly disagree, 5: strongly agree	Cognitive and affect-based
9	Eid & El-gohary (2015)	Tourism	4 items Uni-dim	1: strongly disagree, 5: strongly agree	Emotion, performance, cognitive
10	Noyan & Şimşek (2014)	Shopping	7 items Uni-dim	1: completely disagree, 10: completely agree	General satisfaction, affective, value, disconfirmation, cognitive and need fulfilment
11	Hassan, Jusoh & Hamid (2014)	Insurance	5 items Uni-dim	1: strongly disagree, 7: strongly agree	General satisfaction, affective, disconfirmation and cognitive
12	Eisingerich et al., (2014)	Financial services	3 items Uni-dim	1: strongly disagree, 7: strongly agree	General satisfaction, affective and



					cognitive
13	Loureiro, et al., (2014)	Shopping	3 items Uni-dim	1: strongly disagree, 10: strongly agree	Cognitive and affect-based
14	Giovanis et al., (2014)	Telecommunication	3 items Uni-dim	1: strongly disagree, 7: strongly agree	Emotion
15	Suki (2014)	Airlines	3 items Uni-dim	1: strongly disagree, 5: strongly agree	Emotion, performance, cognitive
16	Wu (2014)	Casino	3 items Uni-dim	1: strongly disagree, 7: strongly agree	General satisfaction, affective and cognitive
17	Ali (2014)	Hotel	4 items Uni-dim	1: strongly disagree, 5: strongly agree	Cognitive and affect-based
18	Koufteros et al., (2014)	Web purchase	8 items Uni-dim	1: strongly disagree, 7: strongly agree	General satisfaction, affective, disconfirmation,
19	Koufteros et al., (2014)	Web purchase	9 items Uni-dim	1: strongly disagree, 7: strongly agree	General satisfaction, affective, disconfirmation,
20	Terpstra & Verbeeten (2014)	Financial services	9 items Uni-dim	1: totally disagree, 4: totally agree	General satisfaction, affective, disconfirmation,
21	Chakraborty & Sengupta (2013)	Telecommunication	1 item Uni-dim	1: strongly disagree, 7: strongly agree	General satisfaction
22	Chou & Chiang (2013)	Software	1 item Uni-dim	(1) Verydissatisfied/very satisfied; (2) Very displeased/very pleased; (3) Veryfrustrated/very contented; (4) Absolutely terrible/absolutely delighted.	Cognitive and affect-based
23	Fatima & Razzaque (2013)	Banking	1 item Uni-dim	1: strongly disagree, 5: strongly agree	General satisfaction
24	Howat & Assaker (2013)	Public Aquatic	2 items Uni-dim	1: displeased, 7: pleased	General satisfaaction and affective
25	Etemad-Sajadi & Rizzuto (2013)	Restaurant	3 items Uni-dim	1: strongly disagree, 5: strongly agree	General satisfaction and affective
26	Gallarza, et al., (2013)	Tourism	3 items Uni-dim	1: very low, 5: very high	Affective, cognitive and need fulfilment

As mentioned above, this research aims to investigate the relationship between the independent variables represented by the quality of service and its dimensions (tangibility, responsiveness, reliability, assurance and empathy) with a dependent variable represented by the satisfaction of student and academic staffs in higher education institutions operating in the city of Sulaimanyah. Clarity of concept

reputation was the moderate variable in higher educational institutions in Sulaimanyah province. The study is focused on managers on the use of service quality of higher educational institutions in Sulaimanyah and implication to local authority. The Service Quality Student Satisfaction and Academic Satisfaction: The Reputation Moderating Role of higher education. Proposed conceptual framework of the study is below.



## 2.2 Related Research

A large block of studies has been presented in the literature aiming to investigate, characterize, assess, evaluate and discuss service quality dimensions in the context of higher education. Peters et al. (1982) defined quality in education as excellence, whereas Crosby (1979) stated that quality in education is directly related to the output of compliance with set goals. In addition, Holdford and Patkar (2003) defined service quality in educational environments as an assessment of the services offered to the students in their educational journey.

Defining and characterizing service quality dimensions is a major challenge, and there is extensive debate surrounding the nature, specifications and number of dimensions (Parasuraman et al., 1985 and Strombeck & Shu, 2014). A major issue linked with service quality is the number of dimensions that compromise this quality. Sometimes the same researchers, after revising and testing their model validity and reliability, end up with different number of dimensions compared to previous

studies. Some studies summarized these into only two dimensions (Cronin, 1992), while other studies listed three dimensions (Lehtinen & Lehtinen 1982), four dimensions (Gatfield, 2000; Angell et al., 2008), five dimensions (Parasuraman et al., 1988; ;Carmen, 1990; Sangeeta et al., 2004), six dimensions (Cronin & Taylor, 1992; Sohail & Shaikh, 2004; Abdullah, 2006a), seven dimensions (Hampton 1993; Randheer, 2015), eight dimensions (Owlia & Aspinwall 1997; Ford et al., 1999), nine dimensions (Joseph & Joseph, 1997; Sultan & Wong, 2010), ten dimensions (Athiyaman, 1997; Joseph & Joseph, 1997; Parasuraman et al., 1984) and some have even reached a total of nineteen dimensions (Carney, 1994). Cultural diversity, demographic variables and personal factors all contribute to the variation in service quality dimensions in various studies, considering the location, situation and environment targeted. Another factor leading to such variation is the difficulty to generalize in many studies due to inappropriate sampling methods and unrepresentative sample sizes.

In overall, culture influences the consumers' expectations for each of the dimensions of service quality (Donthu and Yoo, 1998). With the high levels of concern that the Gulf cultural aspects and characteristics are rooted into the educational system as well as higher education, Randheer (2015) considered culture as a dimension of service quality model in addition to HEdPERF (2006) six dimensions. In upgrading the HEdPERF model, Randheer included the Arab (Gulf) cultural aspects within the existing model. The study concluded that CUL-HEdPERF and its seven dimensions, culture, reputation, academic aspects, non-academic aspects, understanding, program issues, and access is more suitable compared to other models in higher education in gulf region.

A study done in Egypt by El Rawas and El Sagheir (2012) employed the SERVQUAL model, but they suggested that the "empathy" dimension should be replaced by the "image" dimension in when the SERVQUAL model is to be used in an Arab country. This is supported by their assertion that the image of the university is more significant to students' evaluation for service quality in Egyptian higher education institutions while "empathy" dimension is not. The finding of this study was supported by Azoury et al. (2013) who conducted similar investigation in Lebanon and by Randheer (2015) study conducted in Saudi Arabia.

In a recent study presented by Sohail and Shaikh (2014), 310 Saudi Arabian students (males only) pursuing business studies were surveyed in the public King Fahd University of Petroleum and Minerals. The authors identified six major service quality dimensions: physical evidence, responsiveness, curriculum, contact personnel, reputation, and access to facilities. Physical environment such as lighting, classrooms, layout, appearance of buildings and grounds and the general hygiene contributed tremendously to students' evaluation for service quality. On the other hand, 'contact personnel' was the most influencing factor in student's evaluation of service quality.

The generalization of the study outcomes is limited because the sample was taken from one public university, with one gender (males) considered and only business students surveyed. Students of different majors or of different gender, might most probably have different satisfaction levels (Abouchedid and Nasser, 2002). In this regard, several studies found that there is a significant relationship between the students' gender and the perceived service quality (Soutar & McNeil, 1996; Oldfield & Baron, 2000; Umbach & Porter, 2002; Tessema et al., 2012). It was highlighted that females have a tendency to both expect and perceive higher levels of service quality than males (Ruby 1998).

In their investigation, Fernandes et al., (2013), employed a national student survey (NSS) with a sample of 187 graduate students at a British university campus in UAE (United Arab Emirates). Teaching quality and the fundamental academic variables of the programme had the most significant impact on students' satisfaction. On the other hand, factors including academic feedback, IT resources and library had no substantial impact on students' satisfaction. The study was limited to one university in UAE and therefore it cannot be generalized even to other universities inside UAE. This claim is supported by the fact that generally UAE universities adopt different educational systems (i.e. American, British, and French).

Another study in this regard was conducted by Senthilkumar and Arulraj (2010), where they recognized three major dimensions in Indian universities: exceptional resources, good faculty and a variety of disciplines. The authors used a convenience and judgmental sampling although the purpose of their study was to develop a new model to measure service quality in higher education in India. Therefore, their sampling methods limits the generalization of their study findings. Douglas et al., (2006) conducted a study in Liverpool John Moores University's in UK- Faculty of Business and Law. They found

that the most significant service quality dimensions are the ones related to teaching and learning, while the dimensions related to the physical facilities are the least important. However, Douglas et al., (2006), covered only one university in UK, and the study was limited to only students studying a business major. Although students of different majors have different satisfaction levels (Abouchedid and Nasser, 2002), the authors of this study didn't claim that the results could be generalized. Instead, they asserted that the findings are only targeting business students' satisfaction at Liverpool John Moores University and not to be generalized across all UK universities.

Considering this debate surrounding service quality dimensions in higher education and the large number of investigations discussing dimensions of various natures and specifications, Table 2 summarizes the service quality dimensions highlighted and employed in major studies targeting service quality assessment in higher education in various countries.

Table 2.

*Service Quality Dimensions Reported in the Literature*

Study	Country of Investigation	Service Quality Dimensions
Abari et al. (2011)	Iran	Guarantee, Sympathy, Facilities, Responsibility and Reliance
Abdullah (2006a)	Malaysia	Reputation, Access, Program issues, Academic aspects, Non-academic aspects and Understanding
Aldridge and Rowley (1998)	United Kingdom	Services and facilities for students, Equal opportunities, Teaching and learning, Feedback and complaints, Communication, Consultation, Teaching and learning support, Disability and environment and Teaching and learning development
Annamdevula and Bellamkonda (2012)	India	Administrative services, Campus infrastructure, Support services, Teaching and course content and Academic facilities
Asefi et al. (2017)	Iran	Assurance, Responsiveness, Empathy, Tangibles and Confidence
Athiyaman (1997)	Australia	Quality of Teaching, Recreational facilities, Library services, Availability of staff for student consultation, Computing facilities, Class size, Student workload and Level of difficulty of subject content
Carman (1990)	United States	Assurance, Responsiveness, Reliability, Tangibles and Empathy
Cronin and Taylor (1992)	United States	Assurance, Responsiveness, Reliability, Tangibles, Empathy
Gatfield (2000)	Australia	Guidance, Academic instruction, Recognition and Campus life
Hadikoemoro (2002)	Indonesia	Academic services, General attitudes, Readiness and Attentiveness, Fair and Impartial and Tangible

Hampton (1993)	United States	Quality of education, Social life-personal, Teaching, Campus facilities, Student Advising, Social life-campus and Effort to pass courses
Joseph and Joseph (1997)	New Zealand	Academic reputation, Program issues, Word of mouth, Time, Location, Program aspects, Campus opportunities, Family, Physical aspects and Peer influence
Lee et al. (2000)	Korea	Overall impression of the university and Overall impression of the education quality
Nguyen and Leblanc (2001)	Canada	Administration, Responsiveness, Curriculum, Physical evidence, Access to facilities, Functional quality, Technical quality
Owino (2013)	Kenya	Human elements, Non-human elements, Core service, Service blueprint and Corporate image
Parasuraman et al. (1985)	United States	Access, Courtesy, Communication, Tangibles, Responsiveness, Reliability, Credibility, Security Understanding and Competence
Parasuraman et al. (1988)	United States	Assurance, Reliability, Empathy, Tangibles and Responsiveness
Pereda et al. (2007)	United Kingdom	Reliability, Tangibility, Sufficiency of resources and Quality of faculty
Randheer (2015)	Saudi Arabia	Reputation, Access, Program issues, Academic aspects, Non-academic aspects, Understanding and Culture
Sohail and Shaikh (2004)	Saudi Arabia	Reputation, Access to facilities, Contact personnel, Physical evidence, Curriculum and Responsiveness
Sultan and Wong (2010)	Japan	Assurance, Dependability, Effectiveness, Competencies, Capability, Efficiency, Unusual Situation Management, Semester and Syllabus
Yusof et al. (2012)	Malaysia	Reliability, Assurance, Empathy, Responsiveness, Tangibles, Communication, Knowledge/Expertise, Systems/Secondary Services, Social Responsibility and Self Development
Lodesso et al. (2018)	Africa	Reliability, Assurance, Empathy, Responsiveness, Tangibles
Mohammed (2014)	Mogadishu	Reliability, Assurance, Empathy, Responsiveness, Tangibles
Khan and Fasih (2014)	Pakistan	Reliability, Assurance, Empathy, Responsiveness, Tangibles
Mang'anyi and Govender (2017)	Kenya	Reputation, Access, Program issues, Academic aspects, Non-academic aspects and Health Service Aspects

Satisfaction student and academic staff is regarded as influencing repurchasing intentions and behavior, which in turn leads to future business income and returns. According to Zhang, Ye, Law, and Li (2010), satisfaction student and academic staff is a complex construct. It has been referred to in different ways (Ahmad, Al-Qarni, Alsharqi, Qalai, & Kadi, 2013; Al-Debi & Al-waely, 2015; Arokiasamy, 2014; Ashdaq, Maupa, Amar, & Nursyamsi, 2015; Daikh, 2015; Ngo & Nguyen, 2016; Wang, Shieh, & Hsiao, 2013; Zakaria *et al.*, 2014). In recent times, researchers have argued that there is a distinction between satisfaction student and academic staff on tangible products and on service experiences.

As a process in time, service quality takes place before, and leads to overall satisfaction student and academic staff. Although Cronin and Taylor originally hypothesized that satisfaction is an antecedent of service quality, their research with a multi-industry sample showed, in a LISREL, SPSS and PLS analysis, an opposite relationship. Service quality appear to be the service factors contributing to customers' satisfaction judgements (Cronin and Taylor, 1992; Muala and Qurneh, 2012; Verma and Singh, 2017; Jobhaarbima, 2017). There are clearly other antecedents.

Overall satisfaction with an experience does lead to customer loyalty. Jobhaarbima (2017) stated that satisfaction student and academic staff is vital to the marketer because it is generally assumed to be a significant determinant of repeated sales, positive word of mouth and consumer loyalty'. Similarly, Arokiasamy (2014) had also argued that "satisfaction can be thought of as an important determinant of brand loyalty", while Minarti and Segoro (2014) claimed that it is the satisfaction with a brand which leads to customer loyalty. This view is also supported by Muala (2016). Fernandes & Solimun (2018) showed empirically that brand loyal customers have a lower probability to switch brands due to higher level of satisfaction. On the basis of the above, satisfaction student and academic staff is indicated as a dependent in the link among service quality and reputation.

Reputation is: (a) stakeholder assessment of the company's ability to meet its expectations, (b) a collective system of subjective trust among social group members, (c) existing collective trust in the organizational field (d) media visibility and stability obtained by companies and (e) collective representations that are in the minds of many people about an organization from time to time (Alessandri et al., 2006). Eckert (2017) said that the company's reputation is relatively stable and long-term in nature as a result of collective assessment by outsiders of the actions and achievements of a company. Hoffmann et al. (2016), reputation reflects the company's bonafideity. Jøsang et al. (2007) defines reputation as something that is often expressed or believed about a person's character or attitude. A university's reputation is "The recognition or subjective and collective assessment of stakeholders to university, which shows their views, attitudes, evaluations, level of trust, admiration, good feelings, and appreciation of the university from time to time as a result of the university's past actions, which can contribute to the achievement of the university's sustainable competitive advantage (Lupiyoadi, 2016). According to Aula and Tienari (2011), university's reputation can be

built in various ways: "societal significance, interdisciplinary innovativeness, and symbolic break with the past". Embed the ideals of becoming the world's top university and building a unique interdisciplinary university that encourages innovation relevant to business practices through the best research and teaching. Emphasizing new things and new beginnings through symbols that are not directly related to the university. The three themes above are the three main pillars to build a high school reputation.

Brand reputation refers to customer's satisfaction of corporate and evaluation of various audiences of the brand (Fombrun & Rindova, 2000). Companies and brands require positive good reputation to attract customers. Therefore, a brand with a negative reputation cannot achieve its pre-determined goals and marketing signals. Consumers consider the brand as a personality, while managers want to maintain a brand. On the other hand, consumers consider brand as celebrity or personality. Brand reputation refers to customer perceptions of services quality associated with brand name (Veloutsou & Moutinho, 2009).

Previous studies have revealed that brand reputation protects companies against economic crises (Sengupta et al., 2014). Koh et al. (2009) claim that brand reputation brings lasting success for companies during a business crisis. Lange et al. (2011) believe that well-known companies with high brand reputation accept less risk of releasing the negative news on their activities in society. Investors have pessimistic view of these companies when they report lower stock return rate, since they have been able to create sense of trust and loyalty in shareholders in light of their reputation.

This brand reputation is also effective in recruiting employees in the organization and in encouraging consumers to purchase goods. Kapfrer (2008) believes that companies use brand as a tool for creating and maintaining a reputation to support their social status and to achieve the desired goal in the labor markets, especially financial markets and enterprise. A well-known brand can contribute to identifying and validating, leading to the creation of desired business relationships. Brand reputation differentiates one corporate from its competitors. For this reason, reputation can be used as a strategic tool that other competitors cannot imitate, not only due its ability to create value, but also due to its intangible nature (Lin & Huang, 2012).



Organization with high service quality will lead to high customer's satisfaction (Abkar, 2017), boost an organization's image (Muala, 2016; Shukor, 2016) and positive customer's behaviour such as re-use intention, recommendation intention and loyalty (Kim and Damhorst, 2010; Zakaria *et al.* 2014). On the contrary, poor service quality will cause the customer to respond in negative attitude, bad word of mouth and low customer repurchase (Lovelock and Wirtz, 2011). Thus, it is essential for the service organization to understand the requirement of their customers and able to adjust their services according to the needs of customers (Vanniarajan and Gurunathan, 2009).

Another essential point by Purcărea, Gheorghe, and Petrescu (2013) who suggested that a persistent investigation of the consumer expectations and perceptions is needed to ensure a long survival of service organization. The right evaluation of service quality will assist organization's managers to identify opportunities, weakness, close the service gaps and organization's resources will be precisely distributed where there is a necessary need. As identified by Seth *et al.* (2005) after reviewing nineteen service quality models in their study, proposed that the main components towards improvement of service quality are (1) deep understanding of market and customer focus; (2) highly motivated staff; (3) precisely comprehend the concepts of service quality and associated factors affecting the same; (4) possess an effective indicators and customer feedback system; (5) effectively operationalize system; and (6) efficient implementation of customer relationship management system.

According to Mucai, Mbaeh, and Noor (2013), service quality is viewed as "a multidimensional concept, perceived and evaluated by the customer based on five dimensions: Tangibility, reliability, assurance, responsiveness and empathy. The concept of service quality was argued to be originally used as part of the framework of service marketing mix with considering customers the focal point (Rajaratnam *et al.*, 2014). Additionally, in studying the development of service quality, (Lovelock and Wright, 1999) highlighted the confirmation-disconfirmation view as the core concept for its development. The confirmation and disconfirmation concept is explained as a comparison of the customers' perceived (experience) with their expectations of the service. This has led some researchers to argue that service quality is a component of customer satisfaction because it reflects trade-offs, personal and situational factors (Zeithaml & Bitner, 2003).

Service quality is commonly defined as a discrepancy between the service expectation and perceived service that is delivered by the organization and the service performance by employees (Syapsan, 2019). In the early foundation of service quality concept, (Grönroos, 1984) service quality model is also known as Nordic perspective which are identified into two dimensions of service quality namely technical quality that concern on “what customer gets” and functional quality that is related on “how he gets it”. Grönroos’s study defined technical quality as “what the consumer receives as a result of interactions with a service firm” and functional quality, is defined as “the way in which the technical quality is transferred”. Grönroos concluded that the technical and functional quality of service built up the corporate “image” of the company. Zeithaml, (1988) in his study in the means-end model had defined service quality as a global judgment or attitude which is related to the overall excellence or superiority of the service and this definition also cited again by Parasuraman, Zeithaml, and Berry, (1988). Mittal and Gera (2013) claimed that the definition of service quality is given by Zeithaml (1988) that is most widely accepted by other scholars for studying service quality. This study uses definition provided by Zeithaml (1988).

The most common and widely accepted measurement scale for service quality is “SERVQUAL”, which was formally established by (Parasuraman *et al.* 1988) and subsequently refined by authors in 1994. They defined perceived service quality as a “global judgment, or attitude, relating to the superiority of the service”. Authors divided service quality dimensions into tangibles, reliability, responsiveness, assurance and empathy. Tangibles reflect customer perceptions about the physical evidence of the service company and reliability is related to the accurate performance of the service. In addition, responsiveness reflects employee’s willingness to help their customers while assurance is related to the behavior and expertise of employees. Finally, empathy is related to customer perceptions about the attention the service provider gives to the customers. Despite its popularity, SERVQUAL instrument was criticized due to ignoring critical elements of the service quality such as product innovativeness and price (Gounaris and Dimitriadis, 2003).

Therefore, authors suggested six dimensions of service quality namely, employee competence, reliability, and product innovativeness, value for money, physical evidence and convenience. Service quality is usually referred to as an evaluation of how well a delivered service conforms to the customer’s expectations.

Service providers should frequently assess the service quality provided to their customers in order to improve their service quality and maintain customer's satisfaction (Bucak, 2014).

Khan and Shambour (2017); Marković and Janković (2013); Wang, Shieh, and Hsiao (2013) agreed with the view presented by Parasuraman, Zeithaml, and Berry, (1994) that the level of customer satisfaction is based on the level of service quality. The concept of service quality has been stressed intensively in marketing studies and academic books since the concept is so important and acts as a main determination to customer satisfaction and behaviour (Lovelock and Wright, 1999; Zeithaml and Bitner, 2003). However, managing service quality is a challenge because it is subjected to the type of industries, type of service setting (Bala, Sandhu, and Nagpal, 2011), customers segmentation and external factors such as economic, market trends and culture (Ganguli and Roy, 2013). Due to these reasons, Bala *et al.* (2011) reported that the service quality is measured in various ways and no agreement between industries took place, although numerous attempts and debates to generalize the measurement of service quality. Generally, there were two major schools of thought lead the service quality literature that is the Nordic school that referred to (Grönroos, 1984) two-dimensional model and American school is referred to (Parasuraman, Zeithaml, and Berry, 1988) five dimensional SERVQUAL model (Karatepe, Yavas, and Babakus, 2005; Martínez Caro and Martínez García, 2007) and scholars generally choose one approach of the two schools (Syapsan, 2019).

In this study, five dimensions of the SERVQUAL measuring instrument have been applied but there are originally ten dimensions of this instrument. The author of the instrument came out with ten different dimensions which include; 1) Reliability 2) Responsiveness 3) Competence 4) Access 5) Courtesy 6) Communication 7) Credibility 8) Security 9) Understanding 10) Tangibles (Parasuraman *et al.*, 1985, p. 48). The original ten dimension of the SERVQUAL measuring instrument was reduced to five dimensions after a refined empirical study conducted by the authors (Parasuraman, *et al.*, 1988). These five dimensions include Tangibility, Reliability, Responsiveness, Assurance and Empathy („RATER“).

Tangibility: Due to the intangible nature of a service which makes it difficult for customers to evaluate the services before decisions are made, customers then turn to

evaluate the tangible aspects of the service firm to have a clue about what the service firm might be capable to deliver. Reliability: This dimension enables a check of whether or not the service provider is reliable in delivering services as promised. Responsiveness: In this dimension, questions are asked in relation to what the consumers think about company's employees. That's if the company's employees are supportive and able to provide services as soon as demanded by the consumers. Assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence. Empathy: the individualized attention the firm provides to its customers. According to Nair *et al.* (2010, p. 37), these dimensions have an independent influence to the one who consumes the services rendered.

The SERVQUAL model is considered as a multi-dimensional construct consists of five dimensions namely tangibility, reliability, responsiveness, assurance and empathy (Chi Cui, Lewis, and Park, 2003). A Parasuraman *et al.* (1988) contended that despite the different nature of the services industry, the assessment of service quality by the customer is still based on the same common criterion that stipulated in five dimensions of SERVQUAL model. The *definition* of five dimensions of SERVQUAL is defined in Table 2.13.

Table 3.

*Definition of SERVQUAL dimensions (Parasuraman et al., 1988)*

Dimension	Definition
Tangible	Physical facilities, equipment, and appearance of personnel.
Reliability	Ability to perform the promised service dependability.
Responsiveness	Willingness to help customers and provide prompt service.
Assurance	Knowledge and courtesy of employees and their ability to inspire trust and confidence.
Empathy	Caring, individualized attention the firm provides its customers.

SERVQUAL model is based on disconfirmation paradigm. Parasuraman *et al.*, (1988); Parasuraman, Zeithaml, and Berry (1985b) theorized and operationalized SERVQUAL as a gap between consumer expectations of 'what they want' and their perceptions of 'that which drives service quality. In addition, Parasuraman et al. (1988) stated that SERVQUAL dimensions are able to provide an overall measurement of service quality. In their study across four different service industries had found that

reliability is the most critical dimension, followed by assurance, responsiveness, tangible and least important dimension is empathy.

According to Kontogeorgos, Tselempis, and Aggelopoulos (2014), the SERVQUAL model can be used as a diagnostic instrument to assist public and private organizations to improve the quality standards by recognizing the strengths and weaknesses for their service procedures. Subsequently, SERVQUAL model as a base has been replicated, adapted and developed to several scales for measuring services (Lee, Lee, and Park, 2014; Rajaratnam *et al.*, 2014). However, the impact of five SERVQUAL's dimensions to overall service quality was varied. For example, the result of Yoo and Donthu (2001) study in higher education in Thailand indicated that reliability achieves a higher score, followed by empathy, assurance, responsiveness and tangible. Another study by Ravichandran (2010) in the bank sector in India found that tangibles record the highest mean score and followed by empathy, responsiveness, reliability and lowest mean is assurance dimension.

Moreover, the number of dimensions to explain service quality sometimes varies after factor analysis was carried out. For example, Kontogeorgos *et al.*, (2014) study in public service in Greek ministry used the Principle Component analysis on five dimensions of SERVQUAL had resulted in only three factors which later are named as customized service, service conditions and tangible. Another scholars, Miranda *et al.*, (2012) in their study had used partial least square (PLS) path modeling in healthcare services which had derived only four dimensions namely health staff quality attributes, efficiency measures, no health staff quality attributes and facilities instead of five SERVQUAL dimensions

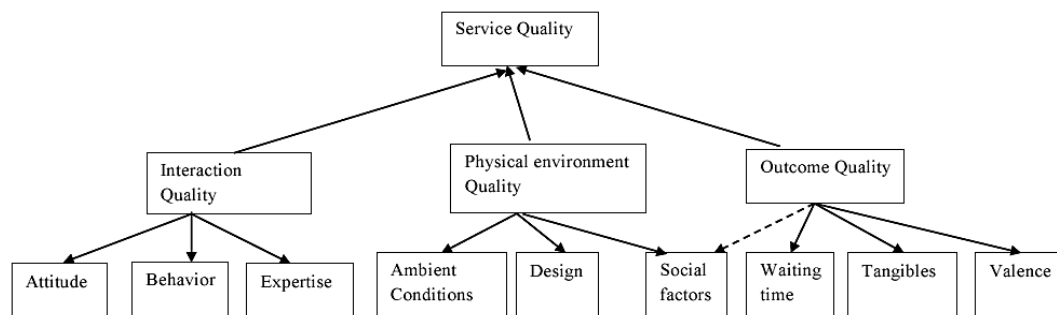
Due to the inconsistency of result and dimensions, SERVQUAL model had faced a great challenge for criticism. However, Parasuraman, Berry and Zeithaml (1991) recommended that SERVQUAL scale was not rigid and it should be adapted or modified accordingly for particular service sectors or different cultures as long as the integrity of scales is preserved. The superiority of SERVPERF was supported by many studies such as (Mittal and Gera, 2013) in retail banking; (Erdil and Yildiz, 2011) in the airline industry; (Jain, 2004) in fast food restaurant and (Burch, Rogers, and Underwood, 1995) uniform rental service. Attention to analyse the concept of service quality as hierarchical or high order construct had gradually increased in past studies where service quality was

viewed more effectively and more meaningful through a global judgment (Clemes, A. Cohen, and Wang, 2013; Daniel Clemes, Shu, and Gan, 2014; Howat and Assaker, 2014).

Service quality is considered as highly complex in nature (De Oña *et al.* 2016) and it is a complex process for service evaluation that may drive from several levels of abstraction (Sureshchandar, Rajendran, and Anantharaman, 2002). Brady *et al.*, (2001) suggested a service quality model that consists of three dimensions namely interaction quality, physical environment quality and outcome quality. Each of dimensions in hierarchical model consists of three sub-dimensions and the cumulative assessment of the sub-dimensions represent the perception of that particular dimension that leads to the overall service quality perception. The Brady and Cronin's conceptual model is depicted in Figure below.

Figure 1.

*Approach to perceived service quality (Brady et al., 2001)*



Research conducted by Brady *et al.*, (2001) concluded that assessment derives from a combination of interaction, environment quality and outcome quality dimensions forms customer perception on overall service quality. Furthermore, the hierarchical model suggested by them has fulfilled the requirement of multilevel conceptualization that offers a single, comprehensive, supported by a strong base of the multidimensional theoretical framework and allows to be analysed on several levels of abstraction. Additionally, Brady and Cronin advised the dimension may differ due to the service industry characteristics and suggested future study to fully investigate deeper on items within the dimensions. The study by Daniel Clemes *et al.* (2014) in mobile communication service in China had confirmed that hierarchical model as proposed by Brady *et al.*, (2001) is able to represent customer's assessment on overall service

quality. In their study, interaction quality shows the most vital role, followed by physical environmental quality and outcome quality. They further suggested that service provider focuses on interaction quality during service delivery stage as this dimension contributes the greatest influence to customers and also put great effort to improve service quality through well trained and professional employees. Table 2.14 lists the hierarchical concept applied in recent studies.

Table 4.

*Path analysis Concept of Service Quality*

Source	Country	Industry	Method	Service Quality Model	Dimensions
(Wu, Li, & Li, 2014)	Taiwan	Theme Parks,	PLS-SEM Formative	Adapted from Brady & Cronin's Hierarchical Model	- Interaction Quality - Physical environment quality - Outcome quality - Access quality - Overall experiential quality
(Rajaratnam et al. 2014)	Malaysia	Rural tourism	PLS-SEM Formative	Adapted from SERVQUAL (perceived service only)	- Accessibility & Logistics - Core Tourism Experience - Hygiene - Information - Security - Value for money - Hospitality
(Wu and Li, 2014)	China	Historic Center of Macau,	SEMAMOS Reflective	Adapted from Brady & Cronin's Hierarchical model	- Interaction Quality - Physical environment quality - Outcome quality - Access quality - Overall experiential quality
(Daniel Clemes et al. 2014)	China	Mobile communication service	Structural Equation Modeling, Reflective	Adapted from Brady & Cronin's Hierarchical model	- Interaction Quality - Physical environment quality - Outcome quality
(Howat and Assaker, 2014)	Australia	Outdoor aquatic centers	PLS-SEM Formative	SERVPERF	- Core services - Secondary services - Staff
(Untachai, 2013)	Thailand	Hospital services	SEMLISREL Formative	Adapted from SERVQUAL (perceived service only)	- Tangible - Responsive - Reliability - Assurance - Empathy
(Clemes et al., 2013)	China	A public university	SPSS Formative	Adapted from Brady & Cronin's Hierarchical model	- Interaction Quality - Physical environment quality - Outcome quality - Overall

					experiential quality
(Miranda et al. 2012)	Spain	Health care service	PLS-SEM Formative	Adapted from SERVQUAL (perceived service only)	- Facilities - Health staff quality - No health staff quality - Efficiency
(Lam et al. 2012)	Malaysia	Services industry	Structural Equation Modeling, Reflective	Adapted from SERVQUAL (perceived service only)	- Tangible - Responsive - Reliability - Assurance - Empathy
(Chen et al. 2012)	Taiwan	Financial service	PLS-SEM Reflective	Adapted from SERVQUAL (perceived service only)	- Tangible - Responsive - Reliability - Assurance - Empathy
(O'Cass and Carlson, 2012)	Australia	Website sport Consumers	PLS-SEM Formative	Website service quality	- e-Communication quality - e-System operation quality - e-Aesthetic quality - e-Exchange process quality
(Ledden, Kalafatis, and Mathioudakis, 2011)	United Kingdom	Higher education	PLS-SEM Formative	Adapted from SERVQUAL (perceived service only)	- Tangible - Responsive - Reliability - Assurance - Empathy

Based on the above literature review in Table 2.14, this study applied only perceived service quality scale from SERVQUAL. Without underestimating the role of technical quality, this dimension is included together with another five dimensions of SERVQUAL to form service quality as second-order construct. In higher education Institutions, a technical aspect in determining the smooth of operations is essential to ensure excellent higher education Institutions.

This study will employ Parasuraman's SERVQUAL framework as well as the Kotler and Keller (2006) concepts on service quality with major dimensions tangibility, reliability, responsiveness, assurance and empathy.

Tangibility dimension refers to the physical appearance of the product or service such as the availability, cleanliness, and neatness of tools, equipment and technology as well as the professionalism of employees. The aspects of tangibility dimension refer to the use of promotional items to contribute to the brand recognition and customer loyalty as they facilitate prompt transaction to satisfy the needs of customers (Srinivas and Rao, 2013). Tangible marketing products build customer loyalty because they place branded



items in customers' hands, thus creating a better customer relationship (Parvin, Perveen, and Afsana, 2014).

Reliability refers to the ability of a service provider to perform service dependably and accurately. Service reliability represents a vital determinant of the product quality besides good personal service, staff attitude, skills and knowledge. According to Omar, Saadan, and Seman (2015), most customers emphasize the service "core" which managers need to emphasize in every opportunity and build a "do it right first" attitude. Hence, it is essential for organizations to instill trust among customers to perform their promises. This may involve some attributes such as accurate delivery service, complete order services and truthful to your offering. Reliable services that are provided have the potential to increase and enhance customer retention and loyalty. Untruthful and unreliable services provided would lead to declining the organizational return on investment (Somocor, 2017).

Basically, responsiveness refers organizational willingness to provide customers with a good, quality and fast service to make them feel more valued. Potential customers and current customer's retention increase, as well as problems and issues, decrease, once companies set customer responsiveness as the highest priority. It indicated that ignoring customers inquiries can cause dissatisfaction and make them shift to other competitors' services (Kotler, 2013).

Assurance dimension refers to employees' knowledge, courtesy and ability to incorporate trust and instill confidence that the customers feel safe in their transaction. This dimension is presented in almost all company's activities starting from the persons who answer the phone to the people who interact with the customers every day, assurance must be a priority to sustain long-term profitability and success of the organization. Assurance is defined as confidence that a business establishment instills in their respective clients to make them trust the company and was argued to increase the company's credibility and to have a better competitive stand against its competitors (Mok *et al.* 2011).

Empathy is defined as the ability to experience and relate to the thoughts, feelings, emotions or experience of others as it reveals the magnitude of caring and individual attention given to the customers. The employees' commitment to delivering quality and

efficient services will greatly satisfy customers and powerful tool to achieve organizational objectives (Lai, Chu, and Petrick, 2016).

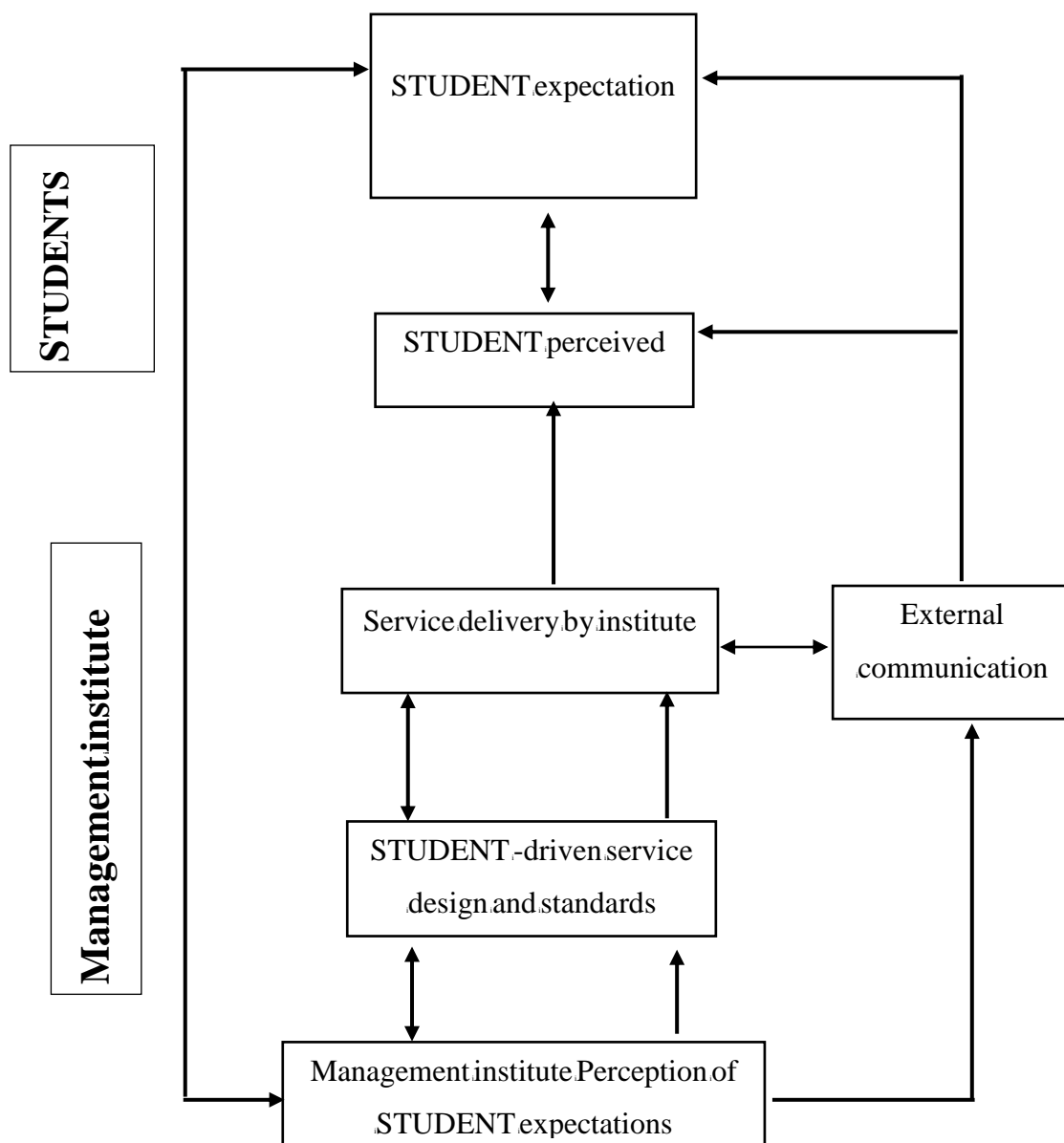
The concern shown by service organization and academician on service quality is always increasing and interesting as the customer's needs and expectation are changed over the time causes service providers to adapt with the current trend of customer's demand and lifestyle. Measuring service quality is a complicated task. Ladhari (2008) study had reviewed thirty studies that posited service quality as a multidimensional construct. However, the dimensions are not the same in respect of number and nature which subjected to the type of services and the dimensions may vary even within the same type of service industry. It indicates that the measures applied to appraise service quality are diverging among customer groups and situations. Due to these factors, varieties of instruments are developed to measure quality in the specific services industry. Lin (2010) had affirmed that SERVQUAL had received the most attention compared to other instrument of service quality and it also had been recognized as the most extensively used instrument for assessing service quality (Stodnick and Rogers, 2008; Fuentes-Fuentes, Lloréns-Montes, and Albacete-Sáez, 2007; Akbaba, 2006) in service management and marketing literature (Stodnick & Rogers, 2008).

Knowledge gap analysis improves the gaps between the current state and the future state or desired state as the beginning point of design and implementation of institutional and university refinement plan. This could be easily mastered by using GAP analysis. This relatively simple tool could be applied to the problem analysis situation. It works as a finished instrument for root-cause analysis. The GAP analysis process can prevent institutional planning teams from concentrating only on problems hence narrowing the improvement plan's scope. It is usually performed in a workshop environment with the participation of a sample of key stakeholders. In business and economics matters, gap analysis association to contrast its actual execution and its potential execution. At its center are two inquiries: "Where are we?" and "Where would we like to be?" If the association is not making the best utilization of its current assets or is renouncing interest in the capital or scholarly resources, at that point, it might perform at a level beneath its potential. The entire examination's objective is to give the association understanding of territories that could be moved forward. In the management of the education industry, Student Satisfaction (Quality of service delivered to students) is an element of the gap between the expected service and the perceived

benefit. Distinguishing the gaps between the present state and the future state or wanted state is the starting purpose of outline and usage of institutional/college change plan.

Figure 2.

*GAP model analysis of quality developed by Zeithaml, Bitner, and Parasuraman of USA (1988). Modified by researcher*



This could be effectively proficient by utilizing GAP analysis, which is generally a straightforward device connected with the issue investigation circumstance. It goes about as an integral apparatus to the primary driver investigation. The GAP analysis

process can be seen as a method for counteracting institutional arranging groups focusing only on issues, subsequently narrowing a change plan's extent.

GAP model analysis can be better used to deduce thoughtfulness and analyze the Sulaimanyah Higher education framework's disorders. After that, used to recommend therapeutic measures and procedures for avoiding or limiting the particular disorders and patching up the different vital components of the framework. This gap thesis is strategies around this model. The performers noted in its unique model are named diversely. Our motivated college/administration foundations are substituted for an advertiser (specialist co-option in this thesis. Learning requirements of academic staff and student's certificate is significant in making as long as higher education service. Students benefit from good instruction, appropriate academic medium exercise skills, active certificate, etc. It is up to the higher education institution to accept those requirements with the infrastructure and service it provides to students. The undergraduate is substituted for a client (benefit taker). The administration institute's primary objective is to build up the strategies to impact the undergraduate's desires and observations to achieve all four. Because the contrasts in desires and recognition can be topped off, we are given a chance to analyze the particular reasons for every one of the gaps.

Establishment Gap-1: Services expected by student less foundations' view of student desires. Foundations for Gap-1: Inadequate research on statistical surveying on what the student and industry need and need from the administration organization. Inadequate correspondence amongst undergraduates and teachers, educators and executives, and student and manager.

Organization Gap-2: University's view of undergraduates desires less student driven benefit plans and measures.

Reasons for Gap-2: Lack of undergraduate driven administration measures. There is Nonappearance of process (conveyance of administrations) administration to center around undergraduate necessities. The insufficient organization has lack of responsibility towards the administrations.

Establishment Gap-3: Student-driven administration plans less administration conveyance. Reasons for Gap-3: Ineffective deployment and choice of educators and

non-instructing staff. There is part of uncertainty and part strife among teachers. Absence of strength, cooperation, and communitarian inquire about, and so forth.

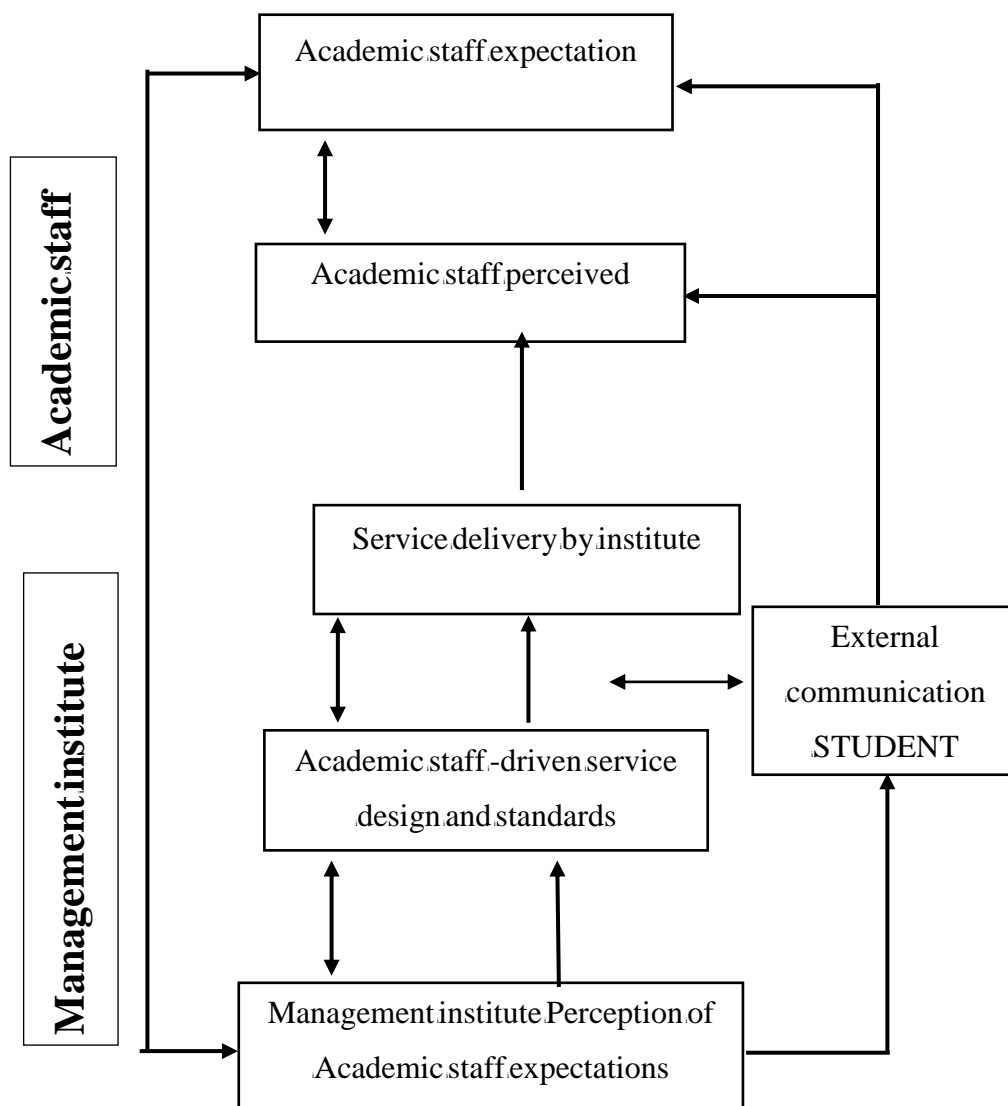
Organization Gap-4: Service conveyance less outside correspondences to undergraduates.

Reasons for Gap-4: Ineffective CRM to deal with student ' assumptions regarding administration from the colleges. Inability to teach undergraduates about their roles and obligations. Over or under promising about the nature of instruction (situations, educating) through prompts for physical proof. Contrasts in the approaches and techniques (structure of syllabi, examination timetables and model papers, infrastructural offices).

Student Gap-5: Student's desires for benefit less undergraduates' impression of administration. Foundations for Gap-5: The initial introduction that the student gets while associating with the organization and educators over telephone or face to face amid affirmation into the foundation grounds. The reaction of academic staff and students were to their disappointment in benefit conveyance; to undergraduate needs and demands; too risky undergraduates; and suddenness in conveying notably great or poor administration to student. Student appraisal of benefit quality measurements, for example, unwavering quality, responsiveness, confirmation, compassion, and effects of foundation instruction.

Figure 3.

*GAP Model of Service Quality in Higher Educational Institutions for Academic Staff. Source Modified by researcher from Rajasekharan, Muninarayanappa & Reddy (2009)*



The basic goal of the responsibility in the middle in a higher educational institution is to improve the strategies in such a way that it can effectively deal with the student's anticipation and perception so that all the gaps as registered below take place suitable to the differences in expectations and perceptions can be filled up. In this thesis, supplier indicates of the responsibility center the faculty or school.

**Gap1:** there is no education on what the academic staffs do

**Gap 2:** there is un-choosing the right service styling and standards.

**Gap 3:** there is no delivering to service standards.

**Gap 4:** there is no matching performance to promise.

**Gap 5:** there is no education on what the responsibility middle delivers

Although strategic management and quality assurance in higher education are disciplines that have been growing independently of one another, the executive methodologies of contemporary advanced education establishments ought to incorporate both of these methodologies. The evaluation of value at higher education organizations is at the core of the quality confirmation framework. Given the after-effects of this appraisal, an enhancement plan ought to be made. These designs are generally formulated for longer timeframes since they incorporate H.R., foundation enhancement. They can be viewed as critical objectives for higher education establishments. The consequences of service quality evaluation ought to be utilized as contributions to arranging and characterizing a technique. Since quality enhancement can incorporate enhancement in different territories, for example, a human asset the board, fund and spending plan, framework, ICT foundation, and managerial procedures, and so on, strategic management is vital to meet the objectives. Quality evaluation and quality assurance ought to wind up apparatuses for the strategic management of higher education establishment. Kettunen (2012) asserts that the quality confirmation framework supplements vital administration because the motivation behind quality affirmation is to guarantee that advanced education establishments meet their vital destinations. We would contend that the other way around the consequences of value evaluation is to characterize vital destinations of advanced education establishments. Quality assessment is the reason for a quality arrangement and institutional procedure. Quality evaluation and quality confirmation at advanced education establishments inside a vital setting should fuse, which implies that the college itself attempts exercises to actualize changes and upgrades quality confirmation at higher education foundations inside a strategic setting. It is critical for advanced education establishments to apply the partner way to deal with vital administration because of the assortment of partners, vital for internal and external assessments, quality affirmation, and consider program improvement. This way of dealing with vital administration is tied in with understanding partners' requests and partner's connections to accomplish institutional improvement destination.

Jabnoun and Hassan (2003) found that banks with better ambiance enhance customer satisfaction in a better way. Association between service quality and customer satisfaction in the banking sector of Sweden is examined by Zineldin (2005). The study found that by combining tangible and intangible attributes of premium quality in products and services provided by higher education institutions, they may create a strong and long-term relationship with their customers.

This service quality dimension comprises of higher education institutions, service equipment, human resources (staff) and means of communication. In simple words, tangibles are about creating foremost impressions. All organizations desire that their consumers get an exceptional and positive foremost impression. Focusing on this particular dimension will help them to gain maximum benefit (Swar, Biranchi Narayan, Sahoo, & Prasant Kumar, 2012). Rajaratnam *et al.*, (2014) concisely explained the idea of tangibles role in the education sector. Service quality is a key tool to achieve customer's attention. Varying behaviors and attitudes of customers demand high service quality to attain their perception of service. Service quality has a linear relationship with success and profitability of the business.

Environment and culture of different areas serve as a guide for businesses on how to adapt their policies in a global perspective for a particular area. They have to make changes in the setup of their outlets and branches. Higher education institutions mostly follow identical office ambiance setups and install similar service equipment all over the globe to maintain a standard (Rajaratnam *et al.*, 2014). But adapting according to cultural needs of particular areas up to some extent will make customers feel more comfortable and loyal (Ganguli and Roy, 2011).

The association between dimensions of service quality and customer satisfaction was investigated by Ibáñez, Hartmann, and Calvo (2006). They found a significant relationship between reliability of services on the satisfaction level of customer. The literature revealed an increased degree of positive relationship between service quality, customer satisfaction and performance (both financial and non-financial) where face-to-face dealing between customer and employee is the only focus. Technology expansion has had a great impact on the choice of service delivery standard and services marketing strategies. This has yielded many prospective competitive advantages including augmenting of productivity and enhanced revenue creation from new services (Muyeed,



2012). Reliability depends on handling customer service issues, performs the services right at the first time; offers services on time and maintain a record of error-free. Moreover, they defined reliability as the most significant factor in conventional service (Parasuraman *et al.* 1988). Reliability also consists of the right order fulfilment; accurate records; accurate quote; right in the bill; Results are more accurate than commissions; keep the promise of service. He also mentioned that reliability is the most significant factor in higher education institutions (Muala, 2016).

Responsiveness is defined as "the willingness to help customers and provide prompt service" (Parasuraman *et al.*, 1988). Furthermore, Johnston (1997) defined responsiveness such as speed and timeliness of service delivery. This consists of processing speed and service capabilities to respond promptly to customer service requests, and short waiting time and queuing time Zeithaml *et al.*, (1996) defined responsiveness as the interests shown in providing prompt service to customers when required. Further, it was researched and agreed that the willingness or readiness of employees to provide the required customer service without any inconvenience at any time will strongly influence the level of customer satisfaction (Parasuraman *et al.* 1988). Customers get satisfied when banks provide individual attention and the employees are paying attention to the problems experienced by customers regarding safety in the transaction (Ngo and Nguyen, 2016). More specifically, responsiveness is defined as the willingness or readiness of employees to provide services. It contains the timeliness of service (Parasuraman *et al.* 1985). It also contains the understanding of the needs and requirements of the customer, easy operation time, individual attention provided by the staff, attention to the problem and customers' safety in their dealings (Ngo and Nguyen, 2016). Finally, in this research, responsiveness is the readiness for higher education institutions (Ashdaq *et al.* 2015).

In addition to tangibles, reliability and responsiveness; assurance has been identified as a significant dimension of service quality by Parasuraman *et al.*, (1988). They proposed that all of these dimensions significantly enhance customer satisfaction. It is believed that if the employees of higher education institutions display trustworthy behavior, the satisfaction level of customers can be enhanced significantly (Ashdaq *et al.* 2015). It may also positively influence repurchase intention of customers (Ndubisi, 2006; and Ndubisi & Wah, 2005).

A positive and significant relationship is found between empathy and customer satisfaction by Iglesias and Guillén (2004). It was proposed in another research study, that customers may remain unsatisfied with service quality if a gap is left in empathy. It was also established by Al-Marri *et al.*, (2007) that customer satisfaction is significantly impacted by empathy. It makes customers contented and in the long-run serves as an important predictor in improving the financial performance of the organization.

Wieseke *et al.*, (2012) empirically investigated the role of empathy in service quality and its impact on customer satisfaction. It was established that customers treated empathically are more oftentimes visitors and prone to forgive any mistakes that may occur. Empathy creates an emotional relationship with the customer, providing the customer a touch of importance for business. This leads to retention and creation of new customer's pool. Rajaratnam *et al.*, (2014) had also studied the correlation between service quality dimensions and customer satisfaction in the higher education institutions. It was found that customer loyalty can be won through empathy. Empathy can play role in the improvement of service quality, customer loyalty and finally satisfaction. Karatepe (2011) explored the service environment impact with empathy and reliability on loyalty. Empathy works as a moderator between quality and customer satisfaction. Empathy can change the behaviour of customer ultimately.

Reputation according to Selnes (1993) with regard to the character or attitude of someone or something. Customer satisfaction and brand reputation are included in the principles of loyalty. Reputation has two main foundations, service quality and institutional work. Service Quality itself is the overall completeness of features of a product/service that is capable of providing satisfaction with needs. A strong corporate reputation influences satisfaction (Andreassen & Lindestad, 1998). Reputation is the overall consumer perception of the company, both directly and indirectly related, and what consumers should get when buying a product or service from the company (Fombrun & Shanley, 1990). According to Thomas (2011) that the university's reputation can increase student satisfaction and student loyalty by using two dimensions: Perception of the university's general reputation and perception of study program reputation. Another study concluded that reputation is an important role for customer satisfaction and customer loyalty (Caruana *et al.*, 2004). According to Gul's (2014) there is a significant relationship between reputation, customer satisfaction, and

trust and customer loyalty. Therefore the study provides a positive sign that by increasing reputation, customer satisfaction and trust increases customer loyalty.

According to Selnes (1993) quality of service really determines an institution's reputation because that reputation can provide attraction to attract customers. Customers who receive good quality products, will feel happy and the experience will be shared with others, so the image of that reputation will get stronger. A strong reputation is a value indicator of the product quality or service. The service quality dimension is one of reputation dimensions in educational settings, including tertiary institutions. The university's academic reputation can be measured by reputation at the level of study programs, reputation at the institutional level and academic performance. (Wibowo, 2014). From the description of the student services quality and the institution reputation of a college/university above, it can be assumed that service quality delivery of a college or university directly affects the reputation of a higher education or university.

Higher education reputation has been empirically known as a moderating variable in the relationship between service quality and academic staff satisfaction (Ngo & Nguyen, 2016; Wang, Shieh, & Hsiao, 2005). Understanding the role of reputation is crucial to business and its relationship between service provider and customer. Reputation is considered as unique where this variable can serve the relationship as moderate variable (Ngo and Nguyen, 2016; Ohrabi *et al.*, 2017; Study *et al.*, 2016; Verma, Yogesh and Singh, 2017).

Higher education reputation is becoming one of the most essential objectives which any firm seeks for a long-term relationship with customers and it is considered as the top priority. In retail banking context where the contacts with customers are one of the most core business processes, reputation is becoming the key for success (Belás and Gabčová, 2014); Chavan and Faizan, 2013). One of the main elements in determining higher education reputation is the customer's perception of service quality. Higher education reputation is described as the result of a comparison of the customers' expectations and his or her subsequent perceived performance of service quality (Chavan and Faizan, 2013). According to this conceptualization, perceived service quality is one of the antecedents to overall higher education reputation. Previous studies showed the evidence support this relationship between higher education reputation and service quality (Yee, Yeung, & Cheng, 2011).

There are also debates about the causal relationship between higher education reputation and service quality. Specifically, there are three major positions about this relationship in the literature (Brady *et al.*, 2001). First, as indicated above, service quality is described as an antecedent to customer satisfaction (Naik, Gantasala, and Prabhakar, 2010); Naik *et al.*, 2010). Second, some researchers suggest that higher education reputation is the cause of service quality (Bitner, 1990). The third position of the service quality- satisfaction relationship argues that neither satisfaction nor service quality may be antecedent to the other (Ngo and Nguyen, 2016; Wang *et al.*, 2013). In general, although there is a lack of consensus about the conceptualization of the service quality- satisfaction relationship, service quality is an antecedent to customer satisfaction and it is considered as a dominant position in the recent research, especially in the service context industry like banking (Akhtar *et al.*, 2011; Cameran, Moizer, and Pettinicchio, 2010). In this study, one of the objectives is to empirically test this relationship.

On the other hand, a study done at the Malaysian retail banking industries by (Penang and Kheng, 2010) stated that assurance and empathy possess a great effect on the satisfaction of bank customers. More studies done by Arasli *et al.* (2005) showed that reliability has the highest influence on higher education reputation. It also showed that reliability affects higher education reputation greatly. Finally, Lau *et al.*, (2013) and Saghier and Nathan (2013) claimed that due to the fact that loyalty is related to Higher education reputation, banks performed new effective strategies to improve the quality of service satisfaction and loyalty (Awan, Bukhari, Iqbal, 2011). To conclude, Lau *et al.* (2013) and Saghier & Nathan (2013) had identified the dimensions of service quality as the predecessors of higher education reputation. Many studies had investigated service quality in the retail banking sector in Jordan. Due to the fact that loyalty is related to higher education reputation, banks performed new affective strategies to achieve satisfactory service quality and loyalty (Awan *et al.* 2011).

Although higher education reputation and academic staff satisfaction are distinct constructs, they are highly correlated (Gelade and Young, 2005; Silvestro and Cross, 2000). Academic staff satisfaction is referred as the final consequences of the overall and cumulative experience which customers have with a firm (Brunner, Stöcklin, and Opwis, 2008). Higher education reputation can lead to academic staff satisfaction because people tend to be rational and risk-adverse so that they might have a tendency to

reduce risk and stay with the service providers which they already had good experience with. Actually, higher education reputation has been suggested to be an antecedent of satisfaction in service context in previous studies (Belás and Gabčová, 2016; Coelho and Henseler, 2012; Lam *et al.*, 2004; Mittal and Kamakura, 2001).

There are also many types of relationship between higher education reputation and academic staff satisfaction suggested such as reputation is the core of satisfaction, reputation is one of the necessary components of satisfaction, reputation and satisfaction are the components of ultimate satisfaction and reputation as the starting point of satisfaction (Ngo and Nguyen, 2016). In addition, the relationship between higher education reputation and academic staff satisfaction might be nonlinear. Heskett *et al.* (2008) suggested that academic staff satisfaction should improve dramatically when higher education reputation overcomes a certain level. In sum, the dominant proposition is that reputation is an essential necessary part to achieve academic staff satisfaction.

In addition, as it presented here in early part, service quality is assumed to be an antecedent of higher education reputation. Therefore, it is interesting to test the relationship between service quality and academic staff satisfaction with higher education reputation as the moderate of this relationship. In this stream of research, most of the studies confirmed that there is a positive relationship between service quality and academic staff satisfaction and academic staff satisfaction is usually the moderating between them (Chodzaza and Gombachika, 2013; Lau *et al.*, 2013). In the banking sector context, the service quality- satisfaction relationship is also supposed to be moderated by higher education reputation by previous studies (Kuzniecova, Lebedev, and Nikiforov, 2013; Zalfa, Lee, 2017). In addition, in a meta-analysis about academic staff satisfaction antecedents, the results show that the effect of quality on loyalty become stronger over time (Pan *et al.* 2012). A study by Ngo and Nguyen (2016), An Investigation in Vietnamese Retail Banking Sector revealed that the core service quality to academic staff satisfaction has been fully moderated by academic staff satisfaction. Similar to (Wang *et al.* 2013) study on the management consulting industry had revealed that service quality effects on satisfaction is moderated completely by higher education reputation. Based on the theoretical framework and review of the existing studies, the following hypotheses have been designed for the current study that will be tested. These are designed based on the research gap analyzed through review of the existing literature.

### 2.3 Hypotheses

- H1**     *The tangibility dimension of service quality significantly affects students' and academic staff satisfaction*
- H2**     *The reliability dimension of service quality significantly affects students' and academic staff satisfaction.*
- H3**     *The assurance dimension of service quality significantly affects students' and academic staff satisfaction.*
- H4**     *The empathy dimension of service quality significantly affects students' and academic staff satisfaction.*
- H5**     *The responsiveness dimension of service quality significantly affects students' and academic staff satisfaction.*
- H6**     *The higher education reputation has a moderating relation between service quality and satisfaction.*

## CHAPTER III

### Methodology

#### 3.1 Research Design

This study is descriptive, aimed at exploring the role that the service quality dimensions addressed in the current study can play in achieving student satisfaction in higher education institutions in the city of Sulaimanyah in Northern Iraq. Thus, in light of previous research, the current study's methodology focuses on the following three main subheadings: the study model, the study's hypotheses, and the process of gathering data and data analysis procedures. Completely different method approaches are used. When looking into the analysis's character, researchers will select one methodology or a possible mixture of methodologies to use in their studies. Different forms like an experiment, case study, or survey are chosen among the foremost standard method approaches. The analysis is strictly quantitative or qualitative or, in some cases, a combination of both. There are similar arguments regarding the dominance of qualitative and quantitative analysis, and it has its strengths and weaknesses. Thus the analysis that is chosen must be in line with the aim of the analysis. This analysis aims to measure service quality in the pedagogy sector by aggregation of numerical knowledge from respondents. Bearing in mind the aims and objectives of this analysis, careful literature review, and former studies, the quantitative methodology approach was more acceptable than a qualitative one. Considering the constraints such as monetary resources and time, the analysis was conducted by selecting various scholars of the college of business enterprise and school of Business Administration. All necessary measures were taken to pick a sampling that can permit the generalization of the findings. Specifically, to realize the analysis's aim, a desk-study analysis (articles, books, reports, net sources, statistics.) was initially conducted. According to Sekaran & Bougie (2016), having a proper research design will help the researcher operationalize variables and collect robust data and consequently gain reliable answers that provide reasonable solutions to the problems the research has proposed.

### 3.2 Participants

Participants included 618 education workers and 138 students and academic staff from University of Sulaimanyah, 165 participants from technical school university, 103 from Chihan University, 105 from Sulaimanyah technical institutes, 73 from information technology institutes and 29 from Kurdistan institutes. Information was collected via structured form consisting of four Sections, specifically A, and B, so as to get desired empirical information (original form was taken from Abdullah, F. (2006a).

### 3.3 Data Collection Tools

Feedback regarding university and technical institutes in terms of service quality and name and satisfaction program problems etc. in higher education in Sulaimanyah ought to be investigated. Therefore, there is motivation to identify the amount of satisfaction using SERVQUAL. As mentioned in literature review chapter, there square measure numbers of service quality measuring instruments. Upon careful literature review, HedPERF (Higher Education PERFORMANCE only) was chosen as an instrument to measure the level of service quality in tertiary education (Abdullah, 2006a). The questionnaire was prepared in English; however, it was then translated into Kurdish, which is the dominant language in the study area, as a precaution against the language barrier. The respondents' answers were then back-translated using back-translation methodology (McGorry, 2000). The back-translations were carefully compared against the initial transcripts in order to avoid any discrepancies. For the study, a self-administered questionnaire was designed. The questionnaire was divided into three sections. The first section was devoted to personal information such as gender, age, and field work experience and education level. The second section consisted of questions related to thirty items measuring service quality elements (tangible; reliability; responsiveness; assurance and empathy). The items measuring the five dimensions have been taken from the studies of Annamdevula Bellamkonda (2016), Abdullah (2006) and Zeithaml et al. (1990). Survey questions utilized a 7-point Likert scale to measure the items level of agreement or disagreement ranging from strongly agree, agree, slightly agree, neutral, slightly disagree, disagree and to strongly disagree, respectively.

The third section of the questionnaire covers items measuring satisfaction in terms of the satisfaction with the decision of the institution, the satisfaction with the



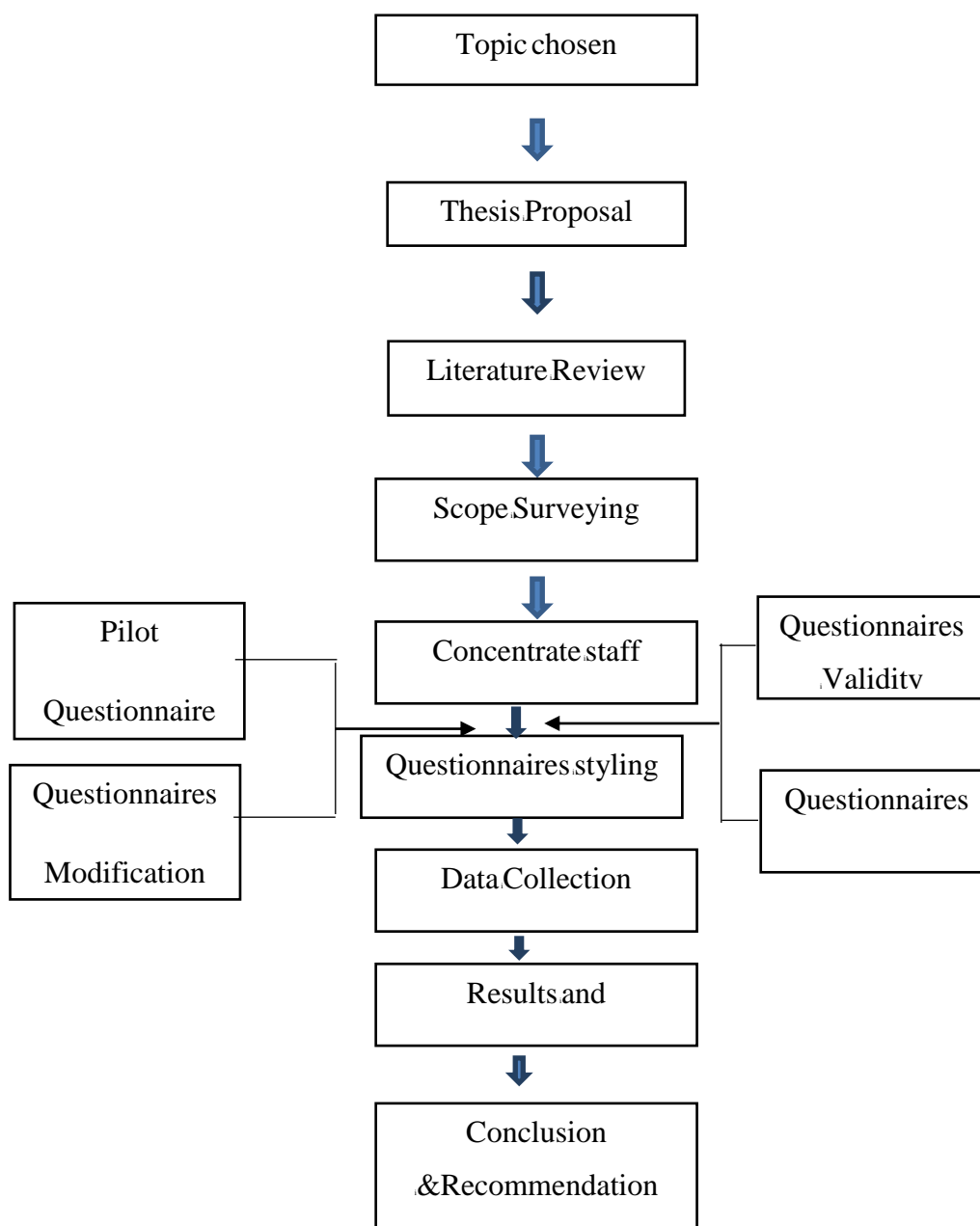
quality of academic service, the satisfaction with the quality of teachers, the satisfaction with the quality of equipment and facilities and other items that can reflect the perceptions of the students regarding the satisfaction in their education organizations. These dimensions have been measured through 12 items found in the studies of LeBlanc & Nguyen (1997), Abdullah (2005) and Annamdevula Bellamkonda (2016). A 7- point Likert scale is also used to grade these items.

### **3.4 Data Collection Procedures**

A pilot study was administered to identify if the survey questions are clear to the participants. As this study's nature is quantitative, it was conducted in the form of a survey, with data being gathered via a survey questionnaire. Before launching the survey, a pilot study was conducted to ensure the survey questionnaire's validity and reliability. The study population included students and academic staff from three public and two private universities, one private technical institute, and two public technical institutes per information taken from general students and academic staff cluster in HEI in Sulaimanyah city of Iraq.

Multiple phases are implemented and followed in this research to accomplish the purpose of the research. The methodology which has been followed by the researcher and which lead to achieve the research objective is shown the in figure below.

Figure 4.

*Research Design Flowchart*

The author presented a situation that service quality is a focused evaluation that reflects the customer's perception of reliability, assurance, responsiveness, empathy and tangibility while satisfaction is more inclusive and it is influenced by perceptions of service quality. Thus, the aim of this figure is to provide the theoretical contribution through the ideas obtained from past literature for this study area, which stems from the existence of an important relationship between service quality dimensions with

customer satisfaction (students) in the higher education institutions in the Middle East in general and in Iraq in particular. Thus, the theoretical framework for this study treats customer satisfaction as transaction-specific. Consequently, customers in this paper are those who consume the services; satisfaction denotes customer's desire to maintain a good relationship with the organization; likewise obtaining the customers for the satisfactory services provided to them by the employees of the organizations.

The questionnaire was prepared in English; however, it was then translated into Kurdish, which is the dominant language in the study area, as a precaution against the language barrier. The respondents' answers were then back-translated using back-translation methodology (McGorry, 2000). The back-translations were carefully compared against the initial transcripts in order to avoid any discrepancies. For the study, a self-administered questionnaire was designed. The questionnaire was divided into three sections. The first section was devoted to personal information such as gender, age, fieldwork experience, and education level. The second section consisted of questions about thirty items measuring service quality elements (tangible; reliability; responsiveness; assurance, and empathy). The items measuring the five dimensions have been taken from the studies of Annamdevula Bellamkonda (2016), Abdullah (2006), and Zeithaml et al. (1990). Survey questions utilized a 7-point Likert scale to measure the items' level of agreement or disagreement ranging from strongly agree, agree, slightly agree, neutral, slightly disagree, disagree, and strongly disagree, respectively.

The third section of the questionnaire covers items measuring satisfaction in terms of the satisfaction with the decision of the institution, the satisfaction with the quality of academic service, the satisfaction with the quality of teachers, the satisfaction with the quality of equipment and facilities, and other items that can reflect the perceptions of the students regarding the satisfaction in their educational organizations. These dimensions have been measured through 12 items found in the studies of LeBlanc & Nguyen (1997), Abdullah (2005), and Annamdevula Bellamkonda (2016). A 7-point Likert scale is also used to grade these items.

Consequently, validity and reliability were calculated using factor analysis. The Pearson correlation was used to measure the linear correlation between the constructs (variables) relative to the study. To identify its impact, a multiple regression analysis

was completed. Before performing the regression analysis, assumptions relating to regression were firstly satisfied. The instrument's reliability was found to be 0.854 (implementation of service quality elements) and for achieving satisfaction (0.793). Internal consistency was calculated using Cronbach's alpha for all the factors. Since all the values were above 0.70, the instrument was believed to be reliable. Factor analysis indicated that the instrument was valid because all items were found to have factor loadings greater than 0.40, hence proving the instrument's validity.

In this study for purpose testing, the hypotheses were displayed to acquire more knowledge and richer information about the influences of each service quality dimension. Data collected in this survey of student satisfaction and academic satisfaction views of service quality at Sulaimanyah City University were analyzed to test the null hypotheses. Comparing the views of student satisfaction and academic satisfaction using the modified SERVQUAL and contrasting their views of faculty versus staff suggested using an SPSS analysis, which can be used to determine the effects of more than one factor. In this study, the independent variables for the SPSS were the service quality of the satisfaction. The dependent variables were the status items, namely, the students and academic staff views of the service quality of support staff versus that of faculty. Most of the respondents, 324 or 52.4%, are married, while 294 or 47.6% are single. Most of the respondents, 180 or 29.1%, fall into the age group of (Less than 25 years old), followed by 270 or 43.7%, aged (25 to 35 years old), 102 or 16.5% were aged (35 to 45 years old), 66 or 10.7 were (more than 45 years old). Most respondents, 252 or 40.8%, had less than five years of service. This was followed by 186, or 30.1%, with 5 to 10 years of service, 78 or 12.8% with 10 to 15 years of service, 102 or 16.5% with more than 15 years of service.

In terms of Academic Qualification, most respondents, 235 or 38%, held a Bachelor degree, followed by 198 or 32% with a Master (M.A.), 137 or 22.2% held a diploma 48 or 7.8% of the respondents were Ph.D.). As demonstrated in Table, the arithmetic mean on the scale is between 3.74 and 1.78 for the 36 variables and is considered very high on a 7-point scale. Question 16, which refers to the assurance dimension, obtained the highest score of 3.74 on the mean scale. Question 1, which refers to the tangibility dimension, obtained the lowest average of 1.48 on the same scale. Based on all the obtained averages for all the dimensions, the satisfaction was obvious regarding the faculty's service. The most frequent grade (mode) is 7. The

standard deviation is ranged between 0.939 and 2.325. Question (1 and 23), which refer to the tangibility and empathy dimension, obtained the lowest average on the standard deviation scale. Compared to the main Table results, it is evident that the students' expectations regarding physical resources have not been met. The highest average was obtained on Question 16 (2.325), which refers to the assurance dimension and employees' appearance at the university. Simple linear regression has been used to test the influence of the composite variable of service quality elements on satisfaction, as shown in Table 3. The present study results displayed that service quality elements play an important role in successful satisfaction. The results indicated that the service quality elements as an independent variable have a strong relationship ( $R = 0.665$ ) with the dependent variable of satisfaction. The findings also showed that the value of R Square here is 0.407. This means that service quality elements are causing a 40.7% variation in satisfaction. Furthermore, the results indicated that the service quality elements have a significant influence ( $\beta = 0.325$ ,  $p < 0.05$ ) on satisfaction; this result indicates that the service quality elements alone will influence 32.5% on satisfaction. Likewise, Table 3 showed that the findings of multiple regression analysis indicated that the tangibility dimension ( $\beta = 0.182$ ,  $p < 0.05$ ) influences service quality's satisfaction toward the positive dynamics of higher education in Sulaimanyah city. The result suggests that the conduct of tangibility by employees has a positive impact not only on the satisfaction of service quality but also on the service quality of many universities for the higher education organizations, which inevitably results in rising satisfaction of the customers represented by students (Parasumaran, 2010), (Abdullah, 2006). On the other hand, Hasan et al. (2008) confirmed that erroneous conduct of tangibility by employees has an adverse effect in terms of increased inappropriate education risks lead to high-cost losses, which in turn, lead to an excessive delay in service quality and reduced service productivity within the educational institutions. All this usually occurs due to conducting the tangibility of service quality status, thus causing greater service problems, thereby increasing the occurrences of mistakes that lead to lowered levels of satisfaction among both staff and students within higher education organizations. Thus, the regression analysis for the model service quality - satisfaction indicates that its results support the first hypothesis; therefore, this hypothesis has been accepted.

### 3.5 Reliability of the Scale

Cronbach's Coefficient Alpha is applied to test Reliability were calculated using factor analysis. For the measurement of the linear correlation between the constructs (variables) relative to the study, the Pearson correlation was used. To identify its impact, multiple regression analysis was completed. Prior to placing regression analysis, assumptions relating to regression were satisfied. The reliability of the instrument was found to be 0.92 (implementation of service quality elements) and for achieving satisfaction (0.83). Internal consistency was calculated using Cronbach's alpha for all the factors. Since all the values were above 0.70, the instrument was believed to be reliable. The indication of factor analysis was that the instrument was valid because all items were found to have factor loadings greater than 0.40, hence proving the validity of the instrument.

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Table 5.

#### *Cronbach's alpha for Reliability*

NO	DIMENSIONS	Number of paragraphs	Cronbach's coefficient alpha
1	Tangibility	4	0.83
2	Reliability	6	0.92
3	Responsiveness	4	0.88
4	Assurance	6	0.90

5	Empathy	5	0.85
6	Satisfaction	5	0.91
7	Reputation	6	0.86
	Total questionnaire paragraphs	36	0.92

A frequently-asked question is about the number of concentrate sample dimension and their participants. Casey and Krueger (1994) recommend remaining with running concentrate sample dimension till a shape appears then succeeding groups produce only repetitive information (theoretical saturation). Sample dimension was computation at 92% confidence level ( $\alpha = 0.05$ ).

### 3.6 Validity of the Scale

Validity indicates “the degree to which a writing measurement what it is presumed to be measured”. It has various difference and valuation methods. It is used to appreciate tool validity, which includes external, internal, and structural validity (Gravetter & Forzano, 2012). To emphasize a high level of validity, the questionnaire has been limited by the number of academic staff and students, from various universities (the University of Sulaimania - technical school university - Chihan University - Sulaimani technical institutes - Kurdistan institutes) Information were collected via structured form consisting of four Sections, specifically A, and B, so as to get desired empirical information (original form was taken from Abdullah, F. (2006a). These arbitrators presented their opinions on the questionnaire in terms of its content, items' meaning, and suitability. They also offer what they believe necessary to confirm the structure of items to avert any misconstruction and to include that the questionnaire perfects the goals of the research. The end version of the questionnaire was improved due to the specialists' opinions.

The questionnaire's internal validity is the setting up statistical experiment carried out to review the validity of the questionnaire, by locating the correlation coefficients between each item in one field and the complete field. The internal consistency of the questionnaire paragraph was examined by the study amounting to (618) participants. The correlation coefficient between each with the total degree for each dimension was calculated. This is the following statistical test applied to examine the

questionnaire's framework validity by checking the validity of any field and the validity of the completed questionnaire.

Table 6

*Validity*

PARAGRAPH	Relation Coefficient	Sig. Level
Are the arrangements within the class rooms always sensible?	0.70	0.000*
Are the building and premises of Universities fashionable and visually likeable?	0.64	0.000*
Does the Staff of Universities seems skilled and neat?	0.62	0.000*
Are the Internal / External environment appropriate for learning?	0.72	0.000*
Are the Categories controlled in accordance with the schedule of lectures and with no delays?	0.88	0.000*
Are the Lecturers usually reliable: Keep on time / don't cancel categories?	0.84	0.000*
Do the Staff at Universities provides support and facilitate students?	0.90	0.000*
Are the Lecturers show their concern in determination student issues?	0.87	0.000*
Do the Academic staff apply consistent grading criteria?	0.92	0.000*
Are the Students timely informed concerning realization of bound activities (exams, shows, seminars, etc.)	0.86	0.000*
Are the Lecturers knowledgeable in determination of student issues?	0.76	0.000*
Do the academic staff conduct themselves in students' best interest	0.89	0.000*
Are the academic workers pays special attention and provide facilities to students in breakdown their issues?	0.75	0.000*
Do the Students can raise their issues at any time?	0.84	0.000*
Are the Staff friendly & courteous?	0.80	0.000*
Quality of education method is at a high level.	0.82	0.000*
Academic staff has the mandatory and skills, and adequate communication data	0.76	0.000*
Are the lecturers innovative agents of amendment?	0.78	0.000*
Are the academic staff provide skilled answers to students' queries?	0.89	0.000*
Do the communication skills and courses are well schooled in this establishment.	0.77	0.000*
Do the Academic staff show positive attitudes towards students?	0.85	0.000*
Are the Academic staff treats students equally and with respect.	0.87	0.000*
Are the Academic workers accessible for consultations and are forthcoming towards students?	0.91	0.000*



Are the gap hours of laptop rooms convenient to the scholars?	090	0.000*
Are the Staffs polite, kind and skilled in communication with students?	0.87	0.000*
Are you happy and will you suggest that others attend this establishment?	090	0.000*
Are the Satisfaction within the standard of educational service?	0.79	0.000*
Are you happy to be enrolled in this institute	0.88	0.000*
Are the Satisfaction with the standard of lecturers?	0.80	0.000*
Are the Satisfaction with the standard of apparatus and facilities?	0.82	0.000*
Reputation and position of the schools within the setting is adequate	0.86	0.000*
Are you Feeling proud to be related to the campus' activities?	0.83	0.000*
Are the Health services area unit is adequate and necessary?	086	0.000*
Are the establishment encourages and promotes the putting in place of Student's Union?	0.87	0.000*
Are the establishment values feedback from students to boost service performance?	0.90	0.000*
Are the establishment includes standardized and straightforward service delivery procedures?	0.85	0.000*

## CHAPTER IV

### Findings and Discussions

This chapter represents the findings of the study obtained through survey questionnaire which were obtained through the analysis of a total of 618 questionnaires by using the SPSS software package. In addition, the statistical tools that were used in this study for purpose testing the hypotheses were displayed in order to acquire more knowledge and richer information about the influences of each service quality dimension.

#### 4.1 Findings

Data collected in this survey of student satisfaction and academic satisfaction views of service quality at Sulaimaniya City University was analyzed to test the null hypotheses. Comparing the views of student satisfaction and academic satisfaction using the modified SERVQUAL, and contrasting their views of faculty versus staff, suggested the use of an SPSS analysis, that can be used to determine the effects of more than one factor. In this study, the independent variables for the SPSS were the service quality of the satisfaction. The dependent variables were the status items, namely, the students and academic staff views of the service quality of support staff versus that of faculty.

Most of respondents, 324 or 52.4%, are married, while 294 or 47.6% are single. Most of respondents, 180 or 29.1%, fall into the age group of (Less than 25 years old), followed by 270 or 43.7%, aged (25 to 35 years old), 102 or 16.5% were aged (35 to 45 years old), 66 or 10.7 were (more than 45 years old).

Most respondents, 252 or 40.8%, had less than 5 years of service. This was followed by 186, or 30.1%, with 5 to 10 years of service, 78 or 12.8 12.8% with 10 to 15 years of service, 102 or 16.5% with more than 15 years of service.

In terms of Academic Qualification, the majority of respondents, 235 or 38%, held a Bachelor degree, followed by 198 or 32% with a Master (M.A.), 137 or 22.2% held a diploma, and 48 or 7.8% of the respondents were Ph.D.). As demonstrated by Table the arithmetic mean on the scale is between 3.74 and 1.78 for the 36 variables and is

considered very high on a 7-point scale. Question 16, which refers to the assurance dimension, obtained the highest score of 3.74 on the mean scale, and question 1, which refers to the tangibility dimension, obtained the lowest average of 1.48 on the same scale. Based on all the obtained averages for all the dimensions, it is obvious the satisfaction was regarding the service at the faculty are high. The most frequent grade (mode) is 7.

Standard deviation is ranged between 0.939 and 2.325. Question (1 and 23), which refer to the tangibility and empathy dimension, obtained the lowest average on the standard deviation scale. Compared to the results in the main Table, it is evident that the students' expectations regarding physical resources have not been met. The highest average was obtained on Question 16 (2.325), which refers to the assurance dimension and the appearance of employees at the university. Simple linear regression has been used to test the influence of the composite variable of service quality elements on satisfaction as shown in Table 3. The results of the present study displayed that service quality elements play an important role in the successful satisfaction.

Indicated that the service quality elements as an independent variable have a strong relationship ( $R = 0.665$ ) with the dependent variable of satisfaction. The findings also showed that the value of R Square here is 0.407. This means that service quality elements are causing 40.7% variation in satisfaction. Furthermore, the results indicated that the service quality elements have a significant influence ( $\beta = 0.325$ ,  $p < 0.05$ ) on satisfaction; this result indicates that the service quality elements alone will have an influence of 32.5% on satisfaction. Likewise, Table 3 showed that the findings of multiple regression analysis indicated that the tangibility dimension ( $\beta = 0.182$ ,  $p < 0.05$ ) has an influence on the satisfaction of service quality toward the positive dynamics of higher education in Sulaimani city. The result suggests that the conduct of tangibility by employees has a positive impact not only on the satisfaction of service quality, but also on the service quality of many universities for the higher education organizations which inevitably results in rising satisfaction of the customers represented by students (Parasumaran, 2010), (Abdullah, 2006). On the other hand, Hasan et al. (2008) confirmed that erroneous conduct of tangibility by employees has an adverse effect in terms of increased inappropriate education risks lead to high-cost losses, which in turn, lead to an excessive delay in service quality and reduced service productivity within the educational institutions. All this usually occurs as a result of

conducting the tangibility of service quality status, thus causing greater service problems, thereby increasing the occurrences of mistakes which lead to lowered levels of satisfaction among both staff and students within higher education organizations.

Table 7.

*Marital Status*

Marital State	Frequency	Percent	Cumulative Percent
Single	294	47.6	47.6
Married	324	52.4	52.4
Total	618	100.0	100.0

Most of respondents, 180 or 29.1%, fall into the age group of (Less than 25 years old), followed by 270 or 43.7%, aged (25 to 35 years old), 102 or 16.5% were aged (35 to 45 years old), 66 or 10.7 were (more than 45 years old) as showed in the table 8.

Table 8.

*Age*

Age	Frequency	Percent	Cumulative Percent
Less than 25 years	180	29.1	29.1
From 25 - 35 years	270	43.7	43.7
From 35-45 years	102	16.5	16.5
More than 45 years	66	10.7	10.7
Total	618	100.0	100.0

Most respondents, 252 or 40.8%, had less than 5 years of service. This was followed by 186, or 30.1%, with 5 to 10 years of service, 78 or 12.8 12.8% with 10 to 15 years of service, 102 or 16.5% with more than 15 years of service as showed in the table 9.

Table 9.

*Years of service*

Number of years of service	Frequency	Percent	Cumulative Percent
Less than 5 years	252	40.8	40.8
From 5-10 years	186	30.1	30.1
From 10-15 years	78	12.6	12.6

More than 15 years	102	16.5	16.5
Total	618	100.0	100.0

In terms of Academic Qualification, the majority of respondents, 235 or 38%, held a Bachelor degree, followed by 198 or 32% with a Master (M.A.), 137 or 22.2% held a diploma, and 48 or 7.8% of the respondents were Ph.D.). As demonstrated by Table the arithmetic mean on the scale is between 3.74 and 1.78 for the 36 variables and is considered very high on a 7-point scale. Question 16, which refers to the assurance dimension, obtained the highest score of 3.74 on the mean scale, and question 1, which refers to the tangibility dimension, obtained the lowest average of 1.48 on the same scale. Based on all the obtained averages for all the dimensions, it is obvious that satisfaction was regarding the service at the faculty are high. The most frequent grade (mode) is 7 as showed in the table 10.

Table 10.

*Academic Qualification*

Academic Qualification	Frequency	Percent	Cumulative Percent
Diploma	137	22.2	22.2
Bachelor	235	38.0	38.0
Master(M.A.)	198	32.0	32.0
Ph.D.	48	7.8	7.8
Total	137	22.2	22.2

Table 11.

*Cronbach's alpha for Reliability*

Respondents Information							
Gender		Age		Field work experience		Education level	
Items	N(%)	Items	N(%)	Items	N(%)	Items	N(%)
Male	360(58.3)	Under 25 years	180(29.1)	<5 years	252 (40.8)	Diploma Degree	137(22.2)
Female	258 (41.7)	25-34 years	270(43.7)	5-10 years	186 (30.1)	Bachelor Degree	235(38.0)
		35-45 years	102(16.5)	11-15 years	78 (12.6)	MSC Degree	198(32.0)

		Over 45 years	66(10.7)	>15 years	102 (16.5)	PHD Degree	48(7.8)
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The gender distribution of employees was 58.3% male and 41.7% female. A possible explanation for this distribution is attributed to the reality that employees in most industrial and service sectors in northern Iraq are male-dominated. 43.7% of the employees were between 25-34 years old; 29.1% were under 25; 16.5% were between the ages of 35-45; and only 10.7% were over 45 years of age. This data proves that most of the participants were young and energetic people who would be able to enhance the service quality elements successfully. Fieldwork experience distribution among the employees was as follows: the majority of the participants were appointed in their current organizations for less than 5 years (40.8%); for more than 5 years but less than 10 years (30.1%); more than 15 years' experience (16.5%); and between 11 and 15 years (12.6%). These statistics indicate that most of the participants were well-experienced in the field and thereby have the aptitude to implement the service quality elements systems toward the achievement of the required satisfaction in HEIs. The distribution of the employees' educational backgrounds indicated that the majority (38.0%) had received a bachelor's degree; 32.0% held a post-graduate degree; 22.2% held a diploma degree; and 7.8% held a PhD degree. The summation of the distribution points to a very healthy demographic composition that have the aptitude to generate new ideas and beneficial programs that will enable the implementation of each service quality element problem-free.4.

Question 16, which refers to the assurance dimension, obtained the highest score of 3.74 on the mean scale, and question 1, which refers to the tangibility dimension, obtained the lowest average of 1.48 on the same scale. Based on all the obtained averages for all the dimensions, it is obvious that satisfaction regarding the service at the faculty are high. The most frequent grade (mode) is 7.

Standard deviation is ranged between 0.939 and 2.325. Question (1 and 23), which refers to the tangibility and empathy dimension, obtained the lowest average on the standard deviation scale. Compared to the results in main Table, it is evident that the students' expectations regarding physical resources have not been met. The highest average was obtained on Question 16, (2.325) which refers to the assurance dimension and the appearance of employees at the university.

## 4.2 Dimension Variable

Dimension related to tangibles includes questions 1 to 4 and analyzes physically tangible and visible assets important for providing the service (for example equipment, infrastructure, interior, teaching materials, brochure, etc.). Dimension related to reliability is represented by questions 5 to 10 and analyzes the ability to deliver the promised service accurately and dependably (for example to resolve student problems, claims and requests). Third dimension (responsiveness) includes questions 11 to 14 and analyzes the attention directed towards students in order to provide prompt service. Dimension related to assurance (questions 15 to 20) analyzes knowledge and courtesy of academic and non-academic staff and their ability to convey trust and confidence. The fifth dimension of this model (empathy) includes questions 21 to 25 and is related to individualized attention and care which is provided to students and their specific needs. Sixth dimension related to satisfaction and last dimension related to reputation in this research 7-point Likert scale was defined so that strongly agree is coded as 7 and strongly disagree as 1. After data collection, the data was analyzed using descriptive statistics before it was used in accordance with the SERVQUAL methodology as shown in table.

Table 12.

### *Dimension Variable*

DIMENSION	VARIABLE (QUESTION)
TANGIBLE	1-4
RELIABILITY	5-10
RESPONSIVENESS	11-14
ASSURANCE	15-20
EMPATHY	21-25
SATISFACTION	26-30
REPUTATION	31 – 36

### Correlation Analysis

Table 13.

#### *Service Quality & Satisfaction Correlation Matrix*

	Tangibility	Reliability	Responsiveness	Assurance	Empathy	Satisfaction	Reputation
Tangibility	1						
Reliability	.551**	1					
Responsiveness	.318**	.263**	1				
Assurance	.299**	.248**	.717**	1			
Empathy	.465**	.434**	.640**	.602**	1		
Satisfaction	.543**	.534**	.654**	.578*	.523**	1	
Reputation	4.89	1.03	.87	.67**	.545	.619**	1

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

The Pearson correlation coefficient illustrates the relationship between service quality sub-dimensions (tangibility, responsiveness) that all the dimensions have a moderately strong and positive association with satisfaction. As soon as the association was proven between variables, a regression analysis which employed a multiple regression technique was conducted in order to gain a better understanding of the impact that can play every dimension of service quality towards enhancing customer satisfaction represented by students in higher education institutions.



### 4.3 Regression Analysis for Service Quality with Satisfaction

Table 14.

#### *Regression Analysis*

Model	R	R <sup>2</sup>	Adj.R <sup>2</sup>	F	Sig.	$\beta$	t	P
<b>1</b>	.665	.407	.453	69.298	0.000			
<b>Intercept</b>						0.476	9.050	.000
<b>SQE</b>						.325	7.081	.000
	.635	.403	.450	68,721	0.000			
<b>Tangibility</b>						.182	5.495	.026
<b>Reliability</b>						.545	10.374	.000
<b>Responsiveness</b>						.145	3.225	.000
<b>Assurance</b>						.187	4.306	.001
<b>Empathy</b>						.084	1.654	.099
<b>reputation</b>						.344	1.959	.837

Predictors: (Constant), Service Quality (SQ) & its Dimensions (Tangibility, Reliability, Responsiveness, Assurance, Empathy)

Dependent Variable: Satisfaction (S)

Simple linear regression has been used to test the influence of the composite variable of service quality elements on satisfaction as shown in Table 3. The results of the present study displayed that service quality elements play an important role in the successful satisfaction. The results indicated that the service quality elements as an independent variable have a strong relationship ( $R = 0.665$ ) with the dependent variable of satisfaction. The findings also showed that the value of R Square here is 0.407. This means that service quality elements are causing 40.7% variation in satisfaction. Furthermore, the results indicated that the service quality elements have a significant influence ( $\beta = 0.325$ ,  $p < 0.05$ ) on satisfaction, this result indicates that the service quality elements alone will have an influence of 32.5% on satisfaction. Likewise, Table 3 showed that the findings of multiple regression analysis indicated that the tangibility dimension ( $\beta = 0.182$ ,  $p < 0.05$ ) has an influence on the satisfaction of service quality toward the positive dynamics of higher education in Sulaimani city. The result suggests that the conduct of tangibility by employees has a positive impact not only on the satisfaction of service quality, but also on the service quality of many universities for the higher education organizations which inevitably results in rising satisfaction of the customers represented by students (Parasumaran, 2010), ( Abdullah,

2006). On the other hand, Hasan et al. (2008) confirmed that erroneous conduct of tangibility by employees has an adverse effect in terms of increased inappropriate education risks lead to high-cost losses, which in turn, lead to an excessive delay in service quality and reduced service productivity within the educational institutions. All this usually occurs as a result of conducting the tangibility of service quality status thus causing greater service problems, thereby increasing the occurrences of mistakes which lead to lowered levels of satisfaction among both staff and students within higher education organizations. Thus, the regression analysis for the model service quality - satisfaction indicates that its results support the first hypothesis; therefore, this hypothesis has been accepted. The regression analysis for the model service quality - satisfaction indicates that its results support the first hypothesis; therefore, this hypothesis has been accepted.

Thus, in order to give the tangibility dimension greater impact on service quality satisfaction, this study recommends a need to improve the physical appearance of the service, such as employees' neat appearance, modern-looking equipment, and the materials associated with the service, and that they found it easy to use. Many studies defined tangibility as those related to appearance, equipment, personnel, and communication (Parasuraman et al., 1988; Parasuraman et al., 1991). The regression findings also revealed that service quality's reliability dimension was the most influential dimension (0.545) toward enhancing students' satisfaction in HEIs in Sulaimani city of Iraq. This suggests that the right practices for the reliability of service quality are responsible for 54.5% of the dependent variable of satisfaction. Furthermore, (Quinn et al., 2009; Chen et al., 2007; Brysland & Curry, 2001) have pointed out educational institutions rely heavily on the reliability of service quality in achieving its customer satisfaction towards the reliable services provided to them, which in turn, largely depends based on their employees' capabilities that can be affected by a variety of factors to attain the desired levels of performance. This is owing to the quality of services delivered by educational institutions, which is guaranteed to the extent of their employees' faithfulness to a set of ethical aspects such as 1) Manager-subordinate relationship (Autonomy/empowerment); 2) The ethical instructions and commands, and also for sets of psychological factors such as 1) Motivation and morale; 2) Job security and workload; 3) Awareness and sense of accountability and responsibility (Abdullah, 2006; Brysland & Curry, 2001). Based on the regression

analysis results, hypothesis 2, concerning the significant influence of reliability in the service quality on student satisfaction, is supported.

However, to enhance the impact of the reliability dimension on service quality significantly, the business organizations, including organizations under study, should sympathize with customers' problems, keep accurate records, perform the promised service on time, and have staff ready to help with problems. Moreover, Parasuraman et al. (1985) found that reliability is the ability to perform the customer's services. Similarly, the regression results (14.5%) signaled that service quality's responsiveness dimension has also affected the achievement in satisfaction in HEIs. This means that if the students receive a high level of responsiveness from the administrative staff in the education organizations, this affects the quality of service and thereby enhances the satisfaction of students concerned. Increasing the level of responsiveness extends the lifespan of the service quality, positively impacting educational organizations' reputation toward achieving the satisfaction required by those concerned in those organizations (Pakurár et al., 2019; George & Kumar, 2014; Kassim & Asiah Abdullah, 2010). Thus, the regression analysis results prove that there is a positive relationship between service quality responsiveness dimension and overall satisfaction, thus proving that hypothesis 3, which proposes that there is a significant influence of responsiveness in the service quality on student satisfaction, has been supported.

To enhance the effect of the responsiveness dimension on service quality satisfaction, this study recommends the necessity of willing the employees to help customers (students), where the employees can respond to requests and have the confidence to tell customers when services will be performed. Several authors identify responsiveness as being willing to help clients and give quick service; it is communicated to customers by the length of time they have to wait for assistance and attention to problems (Pakurár et al., 2019). Moreover, the regression analysis illustrated that assurance ( $\beta = 0.187, p < 0.05$ ) affects service quality satisfaction because customers (students) need to feel confident in the knowledge and courtesy of employees and their ability to inspire trust and confidence. These qualities help institutions avoid serious faults in service quality, leading to a lack of satisfaction of the stakeholders associated with educational institutions (Ruben, 1995; Kwiek, 2001; Quinn et al., 2009). The regression analysis findings demonstrate that hypothesis 4, which proposes that there is a significant influence of assurance in the service quality on student satisfaction, is supported.

Thus, to make the assurance dimension have a greater impact on service quality satisfaction, this study recommends developing the capabilities of employees in business organizations, including institutions under study, in terms of capacity to be courteous and to inspire confidence in customers. They have sufficient knowledge and can be trusted. Many studies point out the positive relationship between assurance and customer satisfaction (Ravichandran et al., 2010; Shanka, 2012; Selvakumar, 2016). The analysis showed no significant relationship between empathy ( $\beta = 0.084, p > 0.05$ ) and service quality satisfaction. This is mainly because not enough empathy was provided by the related employees to students when providing the services for them in their organizations (Parasuraman et al., 1985; LeBlanc & Nguyen, 1997; Fombrun & Gardberg, 2000; Chen et al., 2007; Hasan et al., 2008). On the other hand, many studies (Selvakumar, 2016; Navaratnaseel & Periyathampy, 2014; Shanka, 2012; Ravichandran et al., 2010) suggest that enhancing customer satisfaction by empathy occurs while customers (students) feel good care. There are good operating hours and employees' understanding of their needs and expectations (customers), which will affect better performance among competitors in business sectors. Thus, based on the analysis results, hypothesis 5, which proposed a significant influence of empathy in service quality on student satisfaction, is rejected.

Thus, the current study recommends good communication and an understanding of customer (Students) needs, and friendly behavior toward achieving empathy. Also, understanding customer expectations will influence better performance among competitors. These findings are in line with previous studies (Ravichandran et al., 2010; Selvakumar, 2016; Shanka, 2012). Communication might be an element that could build an empathetic relationship between HEI and its customers (Jianu, 2016). A possible solution could be sustainable market communication. Academics and professionals pay more attention to social and environmental aspects that affect human behavior. Companies are more aware of and responsible for activities that impact society and the environment.

Abdullah (2005) defined reputation variable as decisive factor for students that is responsible for creating professional image of the institution (Abdullah, 2005). According to research conducted in Saudi Arabia University, tangibility aspect of Reputation“ creates an instant image of the institution in the eyes of parents and students (Randheer, 2015). Dennis (2013) in his research, conducted the factor analysis of the HEdPERF items and reported that Reputation, Academic Aspects and Non-

academic Aspects are saliently exhibit intended dimensions of the HEdPERF model (Dennis, 2013).

## CHAPTER V

### Conclusion and Recommendations

#### 5.1 Conclusion

Taken together, the results of this study suggest that there is a significant positive association between service quality and student satisfaction. The results are in line with previous studies, which confirm that improving service quality may potentially improve the satisfaction of all stakeholders and beneficiaries represented by students, their parents and family, academic and administrative staff, and society for HEIs. It is essential to prove here that from the regression analysis, quality of service is critical to the survival and profitability of organizations in the current global economic development; therefore, measuring service quality is a major component of the service industry since customer satisfaction has a greater role to play in the retention, profitability, and productivity of a business. Although the study's findings offer valuable insights and interesting results, the most important limitation lies in the fact that the sample size was limited to the higher education sector in the city of Sulaymanyah in northern Iraq. Accordingly, these results' generalizability is subject to certain limitations as only eight HEIs organizations in northern Iraq were selected as cases located in Sulaimanyah city. Thus, it is believed that having a bigger sample size and including more HEIs in the area as a whole may yield different data. Also, there were other limitations during the implementation, such as; 1) The difficulty of obtaining the necessary permission and approval from authorities in order to conduct the study due to the serious security condition in Iraq in general; 2) The time allocated and the costliness of studding to the eight HEI organizations; 3) Insufficient academic publications in this region, this especially in Iraq and the Middle East in general. However, the practical implications for HEIs managers and academics of the current paper are represented in providing a framework and an instrument that higher education institutions can use to improve educational quality continuously. The study's findings will also assist in designing a quality system that involves not just the employees but also the students and academics. Further, the senior university management would benefit by knowing which gaps should receive the greatest attention to gain competitive and comparative advantages. Also, the management of HEIs could use the research results to improve the study processes and increase the students' and academics' satisfaction and loyalty. The

study's main purpose was to investigate the level of satisfaction of students and academic staff regarding service quality at a higher education institution.

The sample consisted of 618 respondents, including students and academic staff at Sulaimanyah City University: The gender distribution of employees was 58.3% male and 41.7% female. A possible explanation for this distribution is attributed to the reality that employees in most industrial and service sectors in northern Iraq are male-dominated. 43.7% of the employees were between 25-34 years old; 29.1% were under 25; 16.5% were between the ages of 35-45, and only 10.7% were over 45 years of age. This data proves that most of the participants were young and energetic people who would successfully enhance the service quality elements. Fieldwork experience distribution among the employees was as follows: the majority of the participants were appointed in their current organizations for less than five years (40.8%); for more than five years but less than ten years (30.1%); more than 15 years' experience (16.5%); and between 11 and 15 years (12.6%). These statistics indicate that most of the participants were well-experienced in the field and thereby have the aptitude to implement the service quality elements systems toward achieving the required satisfaction in HEIs. The distribution of the employees' educational backgrounds indicated that the majority (38.0%) had received a bachelor's degree; 32.0% held a post-graduate degree; 22.2% held a diploma degree, and 7.8% held a Ph.D. degree. The summation of the distribution points to a very healthy demographic composition with the aptitude to generate new ideas and benefit programs that will enable the implementation of each service quality element problem-free. A survey based on the SERVQUAL instrument designed by Parasuraman, Berry, and Zeithaml (1991, Winter), as revised for the study, consisted of 36 items measuring students' expectations of service quality from university and staff and 36 items on their perceptions of service quality from university and staff. The dimensionality of the instrument was determined through factor analysis. That analysis confirms the 5-factor structure of Tangibles, Responsiveness, Reliability, Assurance, and Empathy identified by Parasuraman, Zeithaml, and Berry (1990). Instead, five factors were identified by the researcher. Tangibles and a factor titled Hypotheses were addressed using SPSS when comparing the two factors of Tangibles and Interactions. Also, an item by item analysis was done. Hypotheses were addressed through the use of SPSS when comparing the two factors of Tangibles and Interactions. An item by item analysis was done, using t-tests three items were not related directly to staff and

university. For the remaining items, SPSS was used to contrast the students and academic staff's view. There were no differences between expectations or perceptions of service quality. There were, however, consistently significant differences in their views of the service quality were received from support staff and university with support staff. Perhaps higher education is such a different framework that other experiences one has as a customer do not apply to student life. Besides, researchers have concluded that non-traditional students may have a low self-confidence level and fear that they may not compete academically with the traditional aged student (Hughes; Krager, Wrenn, & Hirt, 1990; Tinto, 1987). Perhaps that fear prevents higher expectations. One also will note that it would be difficult for expectations to be much higher for either group. The instrument was a 7-point Likert scale with 7 reflecting the strongest agreement with expectation statements. Of the 39 items, only seven had less than six: five relating to Tangibles and the two relating to error-free records. Otherwise, all averaged over 6, many over 6.5. For example, the highest mean was for the statement "(Employees) at an excellent university are always willing to help," with a mean of 6.66 for students 24 and under and a mean of 6.71 for students 25 and over. These high expectation scores may confirm the points of Boulding, Staelin, Kalra, and Zeithaml (1992) where they posited that the expectation being measured is not actually what the student expects in service (what will be done) but what the student expects should be done.

Table 16.

*Hypotheses testing*

Hypothesis code	Hypothesis	Decision
H1	Tangibility dimension of service quality significantly affects students' and academic staff satisfaction	Supported
H2	Reliability dimension of service quality significantly affects students' and academic staff satisfaction	Supported
H3	Assurance dimension of service quality significantly affects students' and academic staff satisfaction	Supported
H4	Empathy dimension of service quality significantly affects students' and academic staff satisfaction	Supported
H5	Responsiveness dimension of service quality significantly affects students' and academic staff satisfaction	Supported
H6	Higher education reputation has a moderating relation between service quality and satisfaction	Supported



## 5.2 Implications of the study

### Theoretical implications

The present study enables the understanding of consumer behavioral features, especially in term of students' and academic staff satisfaction in higher education institutions, particularly in Sulaimanyah and the overall higher education. As mentioned in Chapter 1, the service sector plays a pivotal role in a country's economy specifically in Sulaimanyah and part of this sector services is the higher education, becomes it is important for commercial activities and contributes to the quality of life. In short, it implies that the role of higher education is regarded as a basic need of life. Thus, it is imperative to fulfil the requirements and expectations of customers in multifarious backgrounds. This study is an initial effort in investigating the satisfaction of students' and academic staff in Sulaimanyah, including their contributing factors, namely service quality and reputation. The implication of this study in terms of practical and theoretical standpoints, was discussed in the following subheading.

This subheading highlights a number of managerial implications extracted from the Study's findings. As stated in earlier chapters, there was a need to comprehend what establishes service quality in the initial contact with customers and how this relates to reputation by stimulating students' and academic staff satisfaction responses among students' and academic staff. Inappropriate selection of service quality, insufficient deployment resources for implementation and lack of operation control may cause the desired output to be incapable of achieving and creates wastage to the company's resources. Thus, it is of utmost importance for managers to identify the right elements of the service quality as this study confirmed that the variables contained in service quality was varied and performed in several ways in their impact toward customer satisfaction and customer loyalty.

The present study showed that service quality has a significant direct effect on students' and academic staff satisfaction, but its elements respond differently. In this study, the dimensions of the tangibility, reliability, responsiveness, plays a vital role in the service quality, which influences customer's perception regarding students' and academic staff satisfaction in higher education while all the dimensions of service quality demonstrate a critical role in generating satisfaction among higher education.

Secondly, under these circumstances, the results of this study served as proof that the elements of the service quality are interchangeable and depends on what aspect is to be assessed. This evidence also commensurate several past studies such as the study of Jobhaarbima (2017), which claimed that elements of service quality is interrelated with equal importance but gives different impacts to particular services. Another study by Lin (2011) recommended that a business entity can improve its service quality in-service operation by following the priority ranking of service quality elements. Therefore, it demands that managers recognize deeply the service features preferred by their customers and choose the right service quality to be incorporated inside their service operations toward attaining high service performance which gives an additional boost to business competitiveness and sustainability.

Offering services without students' and academic staff satisfaction is meaningless. Also, the human perception of quality and satisfaction cannot be separated when services are being utilized. Thus, satisfaction aspects are important to encourage satisfaction responses. Evidence in this study suggests that service quality with its dimensions, namely tangible reliability and responsiveness performed significantly in developing all the dimensions of service quality, leading to increased satisfaction among academic staff. Daikh (2015) suggests that the satisfaction needs to be mirrored by the satisfaction of service of the higher education product while all items of satisfaction perform the most potent in shaping loyalty responses. Additionally, academic staff satisfaction partakes in the role of the service quality in generating students' and academic staff satisfaction.

### **Managerial implications**

Therefore, managers are advised not to take the satisfaction aspects of their service product lightly. Otherwise loyalty and performance for service consumption will be poor. Ngo and Nguyen (2016) conclude that service quality, reputation and satisfaction works collectively in influencing the behavior of customers. Under this circumstance, it was recommended that managers do a periodical assessment on customer perceptions where the input from the assessment will help the manager to acknowledge customer preferences and review features in service for further improvement. Furthermore, higher education operators should consider adopting customer-friendly measures and market-driven initiatives in order to assess the

underlying information about the expectations and needs of the customers. The assessment by customers on service performance and how academic staff satisfaction is expressed are the essential ingredients in the development of marketing programs. Evidence of this study shows that loyalty was stimulated mainly by the cognitive component in terms of service comparison with others, followed by overall loyalty assessment. For this reason, adapting quality management systems such as the ISO9001 or total quality management is one of the ways to aid higher education in performing better and become more sustainable, as present higher education operators lack in this aspect. Equally important, the result of this study showed the essential role of students' and academic staff satisfaction. It was reported that managers are required to ensure good maintenance practices such as preventive and corrective systems in higher education as customers expect no disruption when they study for higher education. This is their primary objective for consuming the higher education, and maximum loyalty can be obtained if this objective is attained. The most valued higher education spaces are usually those most convenient and closest to the main destination (Almuhri & Alsawafi, 2017).

Thirdly, academic staff satisfaction is seen as a consequence of received students' satisfaction. Therefore, managing academic staff satisfaction is truly important as past studies recognized that academic staff satisfaction still perform a central tendency of service quality and management guidelines which leads to business success, high service performance, profitability, competitive advantage, customer retention, behavioural intention and trust (Kofi Nyarko *et al.* 2016; Rosmayani 2016; Verma and Singh 2017; Wahab *et al.* 2016).

Fourthly, managers must revise and improve the service quality because it was contended that the application of SERVQUAL with five dimensions might cause inadequacy of quality evaluation in services. It was argued that the presence of five dimensions results in lower effect between service quality and academic staff satisfaction. In managing academic staff satisfaction, managers are advised to periodically measure and identify which features and benefits of the services they provided ought to be prioritized for customers. As satisfaction is one of the outcomes from service consumption, managers are required to identify important features from the

beginning stage to the end, for positive things about the higher education institutions to other people, refuse to change to another higher education institutions and service consumptions. Developing a consumption system approach is one of the ways where managers are able to monitor the process flow, be alert to any changes in customer behaviour and respond to them. It enables managers to focus on the most important predictors of performance while providing inputs in designing marketing programs that effectively adapt to customers.

Furthermore, academic staffs should make known clearly the organization's desire in serving their customers by establishing effective flow in communication, cultivating management system to handle customers and provide knowledge on service product through periodical internal meeting and training programmes. The implication of this study is not limited to practitioners only, but also to other related ministries or agencies of the Sulaimanyah government such as the Ministry of higher education and Department of Waqaf, Zakat and Hajj (JAWHAR), higher education institutions and other local authorities. The findings of this study provide detailed information pertaining to which components need focus, in order to enhance public perception on satisfaction in higher education that reach public loyalty. It was suggested that the grading scheme for higher education institutions is reflected in higher education rates. For example, those higher education institutions which intend to charge high higher education rates must comply with high higher education specification. In contrast, those higher education with basic higher education specification should only be allowed to charge higher education rate at a certain range.

Lastly, the Department of Skills Development of the Ministry of Human Resource can utilize the findings of this study as a guideline for developing National Occupational Skills Standard (NOSS) for higher education operation and services in which the syllabus of the skills for NOSS level 3 is approved by Ministry. The input from this study can help the respective department to improve the skills syllabus in the next program reorientation phase and adapt it for the development of NOSS level 4 and 5 of higher education operation and services. By having a systematic syllabus for skills development in higher education operation and services; practitioners, school leavers and also the public would have the opportunities to learn and practice the right approach in delivering higher education through higher education institutions.

### 5.3 Recommendations

A further study focusing on service quality and student satisfaction in all state universities in Sulaimanyah city of Iraq is advised. Likewise, further research needs to examine the links between service quality and satisfaction more closely as a comparative study between state and private HEIs in Sulaimanyah city. Moreover, with no discussion of pricing dimension in the current study, it is hard to analyze aspects of service on a *ceteris paribus* basis; therefore, it is advised to study pricing dimension in the event of a study in the future service quality and satisfaction in business organizations. Also, future research can carry out a factor analysis to explore what other factors influence service quality satisfaction as the results of this study revealed that service quality had only 49% variance effect on customer satisfaction, thus further exploratory factor analysis may shed light on where the remaining 51% influence lies. Future comparative research can also explore any differences in service quality and student satisfaction amongst the new HEIs in Sulaimanyah in northern Iraq.

Adoption of his scale as a measure of service quality on satisfaction context at HEI in the Sulaimanyah city; HEI administration should ensure an encouraging and interactive learning environment for the students and academic staff; Adoption must be as regards the library, providing the needed references to students and academic staff; Enhance the cafeteria area, with fresh food and drink, with a fresh looking; The teaching methods and curriculum need improvements, to meet the need of balancing theoretical-practical exposure within the curriculum; Inspire a sensation of informal friendly environment between academic staff with students, and employees, these emotional dealing play a vital role; HEI should promote its role in communicating with the outside community, and care should be directed toward media tools of the university; Making partnership agreements with the research institutes and universities locally and abroad; Measuring the leading universities and technical institute experiences researchers; Building the capacities for the researchers by providing the help from the most experienced academic staff during the research process:

- Adoption of this scale as a measure of service quality on satisfaction context at HEI in the Sulaimanyah city.
- HEI administration should ensure an encouraging and interactive learning environment for the students and academic staff.

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- Enhance the cafeteria area, with fresh food and drink, with a fresh looking.
- The teaching methods and curriculum need improvements, to meet the need of balancing theoretical-practical exposure within the curriculum.
- Inspire a sensation of informal friendly environment between academic staff with students, and employees, these emotional dealing play a vital role.
- HEI should promote its role in communicating with the outside community, and care should be directed toward media tools of the university.
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Building the capacities for the researchers by providing the help from the most experienced academic staff during the research process.

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## APPENDIX



**Turkish republic of Northern Cyprus  
Near East University  
Faculty of Economics and Administrative Sciences  
Business Administration**

### Research questionnaire

#### **A FIELD STUDY ON SERVICE QUALITY IN HIGHER EDUCATION IN SULAIMANYAH PROVINCE AND ITS IMPLEMENTATION TO LOCAL AUTHORITY**

Dear participant: The aim of this research is to measure service quality at higher education institutions from students and academic staff perspective. Research will be conducted in higher education in Sulaimanyah province. There are no rights or wrong answers in this questionnaire. Any sort of information collected during this research will be kept confidential. Participation in this survey is voluntary but encouraged. We sincerely appreciate your time and participation. If you have any questions, please do not hesitate to contact (jaza hama tofiq ) through the email ([jaza.tofiq@yahoo.com](mailto:jaza.tofiq@yahoo.com)) or ([tofiqjaza003@gmail.com](mailto:tofiqjaza003@gmail.com))

Thank you very much for your cooperation. With all my regards,

**UNDER SUPERVISOR: PROFISOR Dr. MUSTAFA SAGSAN  
CO-SUPERVISOR: ASST.PROF. DR. AHMET ERTUGAN  
RESEARCHER: PHD STUDINT JAZA HAMA TOFIQ BAWA**

NO	DIMENSION	VARIABLE(QUESTION)
A	TANGIBLE	1 – 4
B	RELIABILITY	5 – 10
C	RESPONSIVENESS	11 – 14
D	ASSURANCE	15 – 20
E	EMPATHY	21 – 25
F	SATISFACTION	26 – 30
G	REPUTATION	31 - 36

<b>Personal information</b>								
<b>University</b>								
Gender	Male				Female			
Marital status	Single				Married			
Age	Less than 25 years		From 25-35 years		From 35-45 years		More than 45 years	
Number of years of service	5 years		From 5-10 years		From 10-15 years		More than 15 years	
Academic qualification	Diploma		Bachelor		Master		Ph.D.	
General jurisdiction	.....							
Current job title	.....							

NO	Question	Strongly Disagree	Disagree	Somewhat	Disagree	Undecided	Agree Somewhat	Agree	Strongly Agree
1	Arrangements in the classrooms are always good.								
2	Building and premises of Universities are modern and								
3	Employees of Universities appear professional and neat.								
4	Internal / External environment are very suitable for studying.								
5	Classes are held in accordance with the schedule of lectures and without delays.								
6	Lecturers are generally reliable: Keep time / don't cancel classes.								
7	Staff at Universities provide support and help to students								
8	Lecturers show their concern in solving student problems.								



9	Academic staff applies consistent grading criteria.							
10	Students are timely informed about realization of certain activities (exams, presentations, seminars,							
11	Lecturers are knowledgeable in solving student problems.							
12	Academic staff conduct themselves in students' best interest							
13	Academic staff pays special attention and provide help to students in resolving their problems.							
14.	Students can raise their problems at any time.							
15	Staffs are friendly & courteous.							
16	Quality of education process is at a high level.							
17	Academic staff has the necessary skills, and adequate communication							
18	Lecturers are innovative & agents of change.							
19	Academic staff provides professional answers to students' questions.							
20	Communication skills: Courses are well taught in this institution.							
21	Academic staff show positive attitudes towards students							
22	Academic staff treats students equally and with respect.							
23	Academic staff are available for consultation and are forthcoming towards students							
24	Opening hours of computer rooms is convenient to the students.							
25	Staff is polite, kind and professional in communication with students							
26	I am satisfied with my decision to attend this institution.							
27	Satisfaction with the quality of academic service							
28	I am happy with my decision to enroll in this institute							
29	Satisfaction with the quality of teachers							

30	Satisfaction with the quality of equipment and facilities							
31	Reputation and position of the Universities in the environment is							
32	Feel proud to be associated with the campus' activities							
33	Health services are adequate and necessary							
34	The institution encourages and promotes the setting up of Student's							
35	The institution values feedback from students to improve service							
36	The institution has a standardized and simple service delivery procedures							

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Table 12.

*Questions describe*

Questions	Mean	Median	Std. Deviation	Variance
Are the arrangements within the class rooms always sensible?	1.48	1.00	1.140	1.300
Are the building and premises of Universities fashionable and visually likeable?	2.97	2.00	2.066	4.268
Does the Staff of Universities seems skilled and neat?	3.16	3.00	2.025	4.099
Are the Internal / External environment appropriate for learning?	2.85	2.00	1.939	3.762
Are the Categories controlled in accordance with the schedule of lectures and with no delays?	3.35	3.00	2.039	4.156
Are the Lecturers usually reliable: Keep on time / don't cancel categories?	2.86	2.00	1.850	3.424
Do the Staff at Universities provides support and facilitate students?	3.45	3.00	2.024	4.098
Are the Lecturers show their concern in determination student issues?	3.21	2.00	2.057	4.233
Do the Academic staff apply consistent grading criteria?	2.77	2.00	1.737	3.019
Are the Students timely informed concerning realization of bound activities (exams, shows, seminars, etc.)	3.08	3.00	1.941	3.767
Are the Lecturers knowledgeable in determination of student issues?	3.26	3.00	1.764	3.111
Do the academic staff conduct themselves in students' best interest	2.20	2.00	1.511	2.283
Are the academic workers pays special attention and provide facilities to students in breakdown their issues?	2.28	2.00	1.676	2.809
Do the Students can raise their issues at any time?	2.92	2.00	1.946	3.787
Are the Staff friendly & courteous?	2.59	2.00	1.965	3.859
Quality of education method is at a high level.	3.74	3.00	2.325	5.406
Academic staff has the mandatory and skills, and adequate communication data	3.32	2.00	1.726	2.980
Are the lecturers innovative agents of amendment?	2.93	2.00	1.954	3.817
Are the academic staff provide skilled answers to students' queries?	2.17	2.00	1.578	2.491
Do the communication skills and courses are well schooled in this establishment.	2.47	2.00	1.730	2.992
Do the Academic staff show positive attitudes towards students?	2.40	2.00	1.944	3.780
Are the Academic staff treats students equally and with respect.	2.59	2.00	1.821	3.315

Are the Academic workers accessible for consultations and are forthcoming towards students?	2.92	3.00	1.130	1.278
Are the gap hours of laptop rooms convenient to the scholars?	2.52	2.00	1.435	2.059
Are the Staffs polite, kind and skilled in communication with students?	2.18	2.00	1.245	1.551
Are you happy and will you suggest that others attend this establishment?	2.21	2.00	1.320	1.744
Are the Satisfaction within the standard of educational service?	1.78	1.00	1.024	1.049
Are you happy to be enrolled in this institute	2.44	2.00	1.454	2.114
Are the Satisfaction with the standard of lecturers?	2.45	2.00	1.386	1.920
Are the Satisfaction with the standard of apparatus and facilities?	2.26	1.00	1.871	3.500
Reputation and position of the schools within the setting is adequate	3.07	2.00	1.959	3.837
Are you Feeling proud to be related to the campus' activities?	2.70	2.00	1.911	3.653
Are the Health services area unit is adequate and necessary?	2.83	2.00	2.094	4.384
Are the establishment encourages and promotes the putting in place of Student's Union?	2.12	2.00	.939	.881
Are the establishment values feedback from students to boost service performance?	3.05	2.00	1.744	3.041
Are the establishment includes standardized and straightforward service delivery procedures?	2.42	2.00	1.653	2.733

Table 15.

*Survey Questions*

Question	Strongly Disagree	Disagree	Disagree Somewhat	Undecided	Agree Somewhat	Agree	Strongly Agree
Are the arrangements within the class rooms always sensible?	.		54			78	486
Are the building and premises of Universities fashionable and visually likeable?	78	24	48	42	84	144	198
Does the Staff of Universities seems skilled and neat?	60	48	48	90	96	78	198
Are the Internal / External environment appropriate for learning?	36	78	30	24	78	192	180
Are the Categories controlled in accordance with the schedule of lectures and with no delays?	48	96	60	42	96	126	150
Are the Lecturers usually reliable: Keep on time / don't cancel categories?	18	84	12	90	102	102	210
Do the Staff at Universities provides support and facilitate students?	48	96	96	12	66	192	108
Are the Lecturers show their concern in determination student issues?	78	42	78	12	42	258	108
Do the Academic staff apply consistent grading criteria?	18	90	48		36	318	108
Are the Students timely informed concerning realization of bound activities (exams, shows, seminars, etc.)	30	90	60		144	126	168
Are the Lecturers knowledgeable in determination of student issues?	42	72	30	72	96	258	48
Do the academic staff conduct themselves in students' best interest	18		54	24	114	120	288
Are the academic workers pays special attention and provide facilities to students in breakdown their issues?	54			18	114	186	246
Do the Students can raise their issues at any time?	24	96	6	114	18	162	198
Are the Staff friendly & courteous?	24	48	96	6	48	102	294

Quality of education method is at a high level.	96	156		18	84	114	150
Academic staff has the mandatory and skills, and adequate communication data		144	48	12	102	282	30
Are the lecturers innovative agents of amendment?	30	96	30	24	72	198	168
Are the academic staff provide skilled answers to students' queries?	30		36	54		234	264
Do the communication skills and courses are well schooled in this establishment.		72	36	60	18	186	246
Do the Academic staff show positive attitudes towards students?	18	96		36		168	300
Are the Academic staff treats students equally and with respect.	18	60		144	12	120	264
Are the Academic workers accessible for consultations and are forthcoming towards students?		30	24	90	228	216	30
Are the gap hours of laptop rooms convenient to the scholars?	24	18	30		162	264	120
Are the Staffs polite, kind and skilled in communication with students?			78	6	60	282	192
Are you happy and will you suggest that others attend this establishment?		48		12	102	270	186
Are the Satisfaction within the standard of educational service?			18	36	54	192	318
Are you happy to be enrolled in this institute	18	24	18	30	138	222	168
Are the Satisfaction with the standard of lecturers?		18	60	60	72	240	168
Are the Satisfaction with the standard of apparatus and facilities?	30		120		12	96	360
Reputation and position of the schools within the setting is adequate	54	78	30		96	252	108
Are you Feeling proud to be related to the campus' activities?	54	48		12	168	114	222

Are the Health services area unit is adequate and necessary?	84	18	24	48	90	114	240
Are the establishment encourages and promotes the putting in place of Student's Union?			6	36	168	222	186
Are the establishment values feedback from students to boost service performance?	30	18	114	90	18	234	114
Are the establishment includes standardized and straightforward service delivery procedures?	24		96	18	36	222	222



## **BIOGRAPHY**

Jaza Hama Tofiq was born on February 3, 1970, in Halabja province - Iraq and grew up in Halabja, where he finished primary and secondary school. After that, he graduated from Technical Institute Erbil in 1991 and was employed in Sulaimanyah Technical Institute from 1994 before graduating from Sulaimanyah University Commerce College in 2003. He then received a Master degree in 2011 from Sulaimanyah University, Business Administration department, before attending Near East University, Northern Cyprus, as a PhD student.

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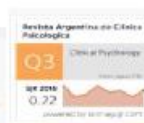
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With Warm Regards,

Editorial  
Office



**ETHICS COMMITTEE APPROVAL****BİLİMSEL ARAŞTIRMALAR ETİK KURULU**

13.05.2022

Dear Jaza Hama Tofiq Ba Wais

Your query regarding your research titled **“The Impact Of Service Quality And Reputation On Satisfaction Within Higher Education Institution And Its Implementation To Local Authority”** has been evaluated. Since you were not informed about the ethics committee application process by your supervisor, your research does not need ethics approval.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Ethics Committee