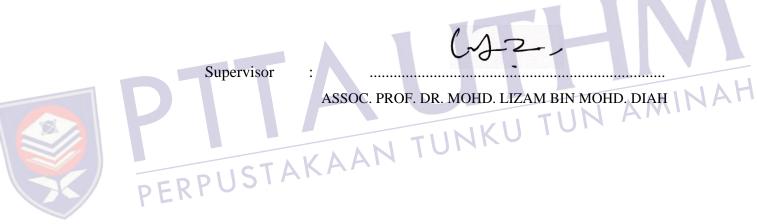MEASURING THE SERVICE QUALITY FACTORS OF PERSPECTIVE
INTERNATIONAL STUDENTS TO IMPROVE THEIR SATISFACTION AND
LOYALTY TOWARDS UNIVERSITY TUN HUSSEIN ONN MALAYSIA
(UTHM)

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I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

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# ABSTRACT

Student satisfaction and quality of education are of compelling interest to students, academic staff, policymakers and higher education researchers internationally. Students' expectations can influence levels of student satisfaction before their study and their pre-conceived beliefs regarding the value of their education. It concerns that with less emphasis on the quality of services that provided by the Higher Education Institution (HEI) to the students may pose a threat regarding the satisfaction, retention and recruitment of the students which reduces the competitiveness of the institution. This study seeks to measure the service quality success factors through the perspective of international students to improve their satisfaction and loyalty towards University Tun Hussein Onn Malaysia. A questionnaire survey was carried out among international students in UTHM. A total of 246 questionnaires were collected and found valid. Analysis of Moment Structures Equation Modelling (AMOS-SEM) model was developed and found that seven groups of factors for service quality influences the satisfaction and loyalty towards UTHM, these factors are namely teaching, course content and supervision; administrative services; academic facilities; campus infrastructure; support services; student's satisfaction and student's loyalty. The findings from the critical factors of service quality through path analysis using structural model indicated that administrative services; academic facilities and support services have a significant effect on student's satisfaction, and student's satisfaction has a significant impact on student's loyalty while teaching, course content and supervision; and campus infrastructure groups were not supported. The implication of this research could enhance and further strengthen UTHM structures and creating new output as an adaptable strategy and education management tool.

# ABSTRAK

Kepuasan servis pelajar dan kualiti pendidikan adalah perkara yang menarik untuk dibincangkan oleh para pelajar, staf akademik, pembuat dasar universiti dan juga, para penyelidik. Tahap kepuasan pelajar boleh juga mempengaruhi jangkaan para pelajar sebelum mereka memulakan pelajaran mengenai kemudahan akademik yang mereka bakal alami. Kebimbangan berkenan terhadap tahap kepuasan hati pelajar boleh mengurangkan tahap kualti program pengajian seterusnya menjadikan ia semakin sukar bagi universiti untuk mengekalkan integriti dan mengurangkan daya tarikan universiti untuk pelajar antarabangsa. Kajian ini dijalankan bertujuan untuk mengukur faktor kualiti perkhidmatan melalui perspektif para pelajar antarabangsa bagi meningkatkan kepuasan dan kesetiaan mereka terhadap Universiti Tun Hussein Onn Malaysia (UTHM). Tinjauan soal selidik dilakukan di kalangan pelajar antarabangsa di UTHM. Sebanyak 246 borang soal selidik telah diedarkan, dikumpulkan untuk kajian ini. *Analysis of Moment Structures Equation Modelling* (AMOS-SEM) telah dibangunkan berdasarkan tujuh kumpulan yang berkaitan dengan faktor penting pandangan pelajar antarabangsa berkenaan kualiti servis yang diberikan iaitu: pengajaran, kandungan kursus yang diikuti dan penyeliaan, perkhidmatan pentadbiran, fasiliti akademik, prasarana kampus dan perkhimatan sokongan yang mempunyai pengaruh yang signifikasi terhadap kepuashatian pelajar. Dapatan kajian mendapati perkhidmatan sokongan mempunyai kesan terhadap kesetiaan pelajar terhadap universiti manakala pengajaran, kandungan kursus yang diikuti dan penyeliaan serta inrastruktur kampus tidak memberi kesan kepada tahap kepuasan dan kesetiaan pelajar-pelajar antarabangsa terhadap UTHM. Implikasi dari penyelidikan ini adalah ia mampu untuk meningkatkan pengukuhan struktur UTHM serta strategi baru untuk memperbaiki pengurusan universiti.

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# CHAPTER 1

## INTRODUCTION

### 1.1    Introduction

Delivering superior service quality is an essential element to generate customers, and it will be the same in the higher education sector context. Higher education management or universities have to provide superior service quality to retain the satisfaction of students and remain competitive in the industry. As noted by Aziz A., (2014), both public and private higher education institutions play the same job, and they offer a wide range of courses to local and international students. According to National Higher Education Strategic Plan 2020 which has been launched by Ministry of Higher Education, (2007), the plan aims to transform local higher education in sync with the global landscape (Chapman *et al*., 2007), and it contains two main thrusts, referred as the importance of widening access, and enhancing and improving quality of teaching and learning Aziz A., (2014).

Higher education institution acts as a service supplier which have direct interactions with students, and a student acts as a main customer or service receiver, who may receive services, provided by the institution. According to Ali *et al*., (2016), the Ministry of Higher Education, (2011) noted that internationalization of the higher education sector is one of the priorities for the Malaysian government, whereby education has been identified as one of the national key economic areas,

and Malaysia is trying to position itself as a stable, safe and relatively affordable place for international students to study.

Besides, it is also noted in recent years that the number of international students studying in Malaysia higher institutions has been increasing steadily over the years and there is an ongoing effort to increase them in institutions to achieve more benefits in the economic, so this requires efforts to improve the strategy to provide excellent service quality for these international students and ensure their satisfaction which can lead to their loyalty to the institution. Therefore, this study will provide a direction for educational managements, administrators and scholars to understand international students' needs, service quality, factors that influence student satisfaction, students' loyalty, and the relationship between them in Universiti Tun Hussein Onn Malaysia (UTHM) which is one of the public universities in Malaysia.

## 1.2    Research Background

The organizations, regardless of their industry, focus on the quality of provided services because of its essential role in developing a competitive advantage, attracting new customers, and retaining the current customers (Ugboma *et al*., 2007). Similarly, in the higher education context, Ali *et al*., (2016) referred to many researchers, who confirmed the importance of quality of services such as Trivellas & Geraki (2008), and the latter stated that providing high-quality services is considered to be one of the most important goals of educational institutes worldwide.

Lemine (2018) mentioned, higher education institutions are service provisioner that are facing intense competition and rapid growth (Malik & Naeem, 2011; Oldfield & Baron, 2000). Therefore, to face these competitions, providing service quality becomes a key factor for the success of HEIs (Hasbullah, Yusoff & Zahari, 2018). According to Rezae *et al*., (2017), like other service industries, service quality is a key factor to success in the higher education sector. Abubakar (2015) mentioned, presently higher institutions of learning are trying to attract a greater number of international students to their programs through employing various strategies to maintain them (Khozaei, Hassan & Khozaei, 2010). The international

student market is essential to the Malaysian economy; therefore, the government is committed to offering quality and certitude in teaching and learning.

Thus, in today higher education environment, international students have been described as a special commodity (Abubakar, 2015). So, one can found some countries like Australia, the United States of America and Britain that have put in mind some strategies, which have been improved from time to time in order to attract the international students. Also, it has been found the same in Malaysia, Sin, Yusof & Sin, (2018) emphasised that, in line with, the Ninth Malaysia Plan, the Malaysian government has aspired to become a regional higher education Centre since 2006 to attract more foreign students.

Malaysian higher education institutions are also attracting a good number of international students. Ali *et al.,* (2016) mentioned, a report published by the Ministry of Higher Education Malaysia in 2011 stated that by the end of 2010, there were more than 70,000 international students out of a total of 450,531 registered students in Malaysian universities, and Malaysia was the 11th largest exporter of educational services, with more than 90,000 students from over 100 countries studying at its schools, colleges and universities (The Malaysian Higher Education System, 2013). In addition, as stated in The Star Online (2018), Malaysia has attracted 170,000 students from over 135 countries, including Asia, Europe, the Middle East and Africa. The MOHE stated that in (2019) 30,341 international students were enrolled at public higher education institutes as mentioned in quick facts Malaysia Educational Statistics (2019).

Consequently, Sin *et al.,* (2018) confirm that the Ministry of Higher Education (MoHE) in Malaysia has targeted to attract 200,000 students by the year 2020. In addition, in its latest international student's mobility survey, UNESCO has recognized Malaysia as one of the top ten preferred destinations for tertiary education among international students (ICEF, 2016). This recognition will significantly boost Malaysia's goal to receive 250,000 international students by 2025. Therefore, Malaysia has become a strong force in international education. Thus, they need to understand the evaluation of these international students for the quality of service, and the important factors, influencing their satisfaction and loyalty.

Malaysia consists of 20 public universities and 47 private universities, and there are 34 university colleges and ten foreign university branch campuses too (list

updated as at November 2018) as stated in STUDY MALAYSIA (2018). Thus, higher education organizations understand that providing high-quality service is essential to attract more international students and satisfy them with the supplied services. According to Parasuraman *et al.,* (1988), the service of an institution is judged with various dimensions, and its quality could define how satisfied a customer is (Galeeva, 2016). The customers would naturally feel more satisfied if the service quality they perceive is higher (Sin *et al.,* 2018). Furthermore, based on the research conducted by Dehghan *et al.,* (2014), the expectations of the customers are connected with their perception of the service quality, and thus the customers' loyalty could be influenced by the quality of the services.

High service qualities in higher education institutions can maintain the current international students and attract a greater number of them which is very important to get more benefits for both higher education institutions and country. Among which, international students contribute to the growth of the economy of the country. For example, the tuition fees of the international students, which are generally higher than that of the local students could be a considerable profit to the institutions. Moreover, if the international students continue their studies in the same university, they will be as one of the essential sources of income to the university (Sin *et al.,* 2018). Thus, it is necessary to explore the important factors of service quality that achieve satisfaction for these students, which are linked with their loyalty to the university.

Despite the gain of the international dimension of higher education for more important nowadays, there have been limited studies exploring the satisfaction of the international students which is also applicable to UTHM University. According to data of public HEIs, data until 31st December 2011 shows that there is an increase in the enrolment of international students. Similarly, UTHM is among the higher institutions in Malaysia that have witnessed an increase in the number of international students.

According to the UTHM International Office, the statistical data has shown that the number of international students was increased. Table 1.1 and Figure1.1 bellow show the rise of enrollments of international students (master's and PhD students) during the last five years. In fact, evaluating the service quality in each period is very necessary to determine the most important factors that influence student's satisfaction in order to provide information for the university managers to

improve their strategies and service quality accordingly. International students are an important source of income to the university and their presence should be retained. By enhancing the service quality, the retention of the international students studying in UTHM can be increase. This research also can contribute to the existing literature and serve as a reference for future research.

Table 1.1: The Enrolment of international students (Master and PhD) in UTHM
during the last five years

| Year | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| Number of international students (Master & PhD) | 420 | 578 | 673 | 801 | 908 |



Figure 1.1: The Enrolment of international students (Master's & PhD) in UTHM
during the last five years

## 1.3    Problem Statement

In recent years there is rapid growth in the number of higher education institutions
and the quality of service is considered to be one of the most important factors which
distinguish one institution from another. Therefore, service quality in HEIs is one of
the important and necessary factors for the success of education institutions. Quality
also plays a significant role in attracting students whether local or foreign, which
leads to gain many advantages; for example, international students contribute to the
growth of the economy, and their fees important for different activities in the
learning institutions, so they are considered to be a main source for the income in
HEIs.

Providing higher service quality is important because the students will be more comfortable during their study, and they will not be concern about the provided services. Students in HEIs are considered as primary customers, and their needs require to be fulfilled such as the need to gain a valuable academic knowledge and good service quality (Yunus *et al.,* 2010).

It is evident that institutions of higher education presently compete in a highly competitive environment, and the universities try to meet students' expectations in every way possible, and as a result, service quality is seen as an essential and important framework of excellence; whereas, the satisfaction of students and loyalty have become significant strategies whether in public or private institutions (Masserini & Pratesi, 2019). In addition, this competition among higher education institutions require them to give more attention to service quality issues in competition to attract highly qualified graduates (Mashenene, 2019).

As mentioned by Kumar (2014), service quality is an essential factor that determines the satisfaction level of students. Supporting this view, the results of the study by Masserini *et al.,* (2019) showed that service quality is a key driver of students' satisfaction. In addition, prior studies also pointed out that student loyalty is very important in improving the institutions competitiveness (Soedijati, 2013). Furthermore, student loyalty is one of the important factors to attract students to the institutions (Elisabeth, 2013).

Contextually, Helgesen & Nesset (2007) stated that the loyalty of a prior student is more important than the loyalty of current students, and this is applicable to any university, any particular course or any other component of the university because student loyalty has a long-term effect. Loyalty of prior students can push them to register in new courses and recommend the institution to others. Therefore, this confirms that student loyalty is important as a source of competitive advantage and for the success of higher education institutions.

Student loyalty is one of the main goals of educational institutions and considered to be a source of competitive advantage (Thomas, 2011). The study by Annamdevula & Bellamkonda, (2016) showed that loyal student was helpful for college administrators to establish suitable programs, to maintain the current students, to attract more students, and to achieve a long-term success. However, as stated by Thomas (2011), there are arguments among scholars that the other factors may also affect student loyalty, and one of these factors is the reputation of the

institution. Confirmed that, the finding of his study showed the impact of the reputation on student loyalty through the mediating variable student satisfaction. Excellent service quality can achieve high level of satisfaction among students which can lead to the loyalty towards the institution. Then, when that is achieved, the institutions can get a lot of economically benefit and advantages and attract more students which makes the competition more intensive among HEIs.

Competition for international students' enrolment in higher education institutions in Malaysia encourages the institutions to deliver high quality of services. National Higher Education Strategic Plan (NHESP) was developed with aim of making Malaysia an international centre of excellence for higher education (Abubakar, 2015). Furthermore, according to the internationalization policy of higher education in Malaysia, the overall number of international students' enrolment in public and private higher learning institutions has increased from 40,525 students in 2005 to 86,916 students in 2010 (MOHE, 2013). This increase continued to grow in 2018 to around 170,000 students as mentioned at the Going Global Conference 2018. In the same line, the statistical data at UTHM, has explained that the number of international students increased from 17 students in 2007 to 493 students in 2014, and to be more than 900 students in 2019 (UTHM international office). However, this increase of international students' numbers requires providing high service quality. Moreover, these services need to be assessed and improved from time to time to ensure that students' needs are fulfilled.

Despite the great importance of understanding international students' perspective to the provided services and the influence of these services on their satisfaction and their loyalty, studies in this area are still limited. According to Sin *et al.,* (2018), although the international dimension of higher education has obtained more importance at the present time, there have been limited studies exploring the satisfaction of international students. This is also applicable to UTHM. In fact, there are small number of studies that have assessed the quality of services in relation to students' satisfaction in UTHM, but the impact of service quality on international students' satisfaction and the effect of the satisfaction on their loyalty have not been inadequately determined.

Reviewing the literatures in UTHM library, there are limited studies that have assessed the service quality provided by the university from the perspective of international students, or the impact of these services on their level of satisfaction

and their loyalty towards UTHM. Many of the existing studies focused on investigating the international students' satisfaction level only in some services, such as the study on accommodation by Abubakar in 2015. Therefore, the above discussion shows the need for the current study. In addition, higher education services not only need to be assessed but also require to determine the instrument to be used as a suitable tool to measure these services.

Despite the success of the general scales which developed to measure the quality of services, the general applicability of these instruments still questionable when reuse it for assess the service quality in higher education sectors Silva *et al.,* (2017). Supported this view Abdullah (2006) when noted, without doubt the use of general methods as a means of measuring service quality in the marketing sectors may have been used with some degree of success; however, this may not be the case for other services in different sectors, particularly higher education.

Therefore, the researchers sought to produce new measurements to evaluate the quality of services specifically in higher education institutions to understand the students' point of view and conduct initiatives to improve the service delivered. Subsequently, this study adopted HiEdQUAL model as the best scale can use it to measure the different services that provided for the international students in UTHM. In between the different models that developed to assess the service quality in HE, it can be mentioned that HiEdQUAL model has a number of strengths when use it to measure the service quality in higher education context El-Alfy & Abukari (2019).

As a result, this study attempts to fill the gap in the previous literature by assessing the different services, provided by UTHM to international students, investigating how these services can impact international students' satisfaction level and its impact on their loyalty towards UTHM by using suitable model developed only to assess the quality of services in higher education. This study will show the relationship between these variables. Therefore, the current study can provide the managers in UTHM with significant information that help to improve the strategies to provide high quality of services in order to achieve high level of satisfaction and loyalty of the international students as they are considered to be the main financial source to HEIs.

**1.4    Research Questions**

Specific research questions for this research are:

(i)   What are the most important factors of service quality from perspective of international students that influence their satisfaction in UTHM?

(ii)  What is the relationship between service quality factors and UTHM international student's satisfaction?

(iii) Does international student's satisfaction have an impact on their loyalty towards UTHM?

Therefore, the efforts that shall be made to provide answers to these questions above, shall shape the direction and thus further sharpen the focus of this study, by setting the research aim and evolving research objectives to operationalize the aim.

**1.5    Research Aim and Objectives**

The main purpose of this study is to identify the level of satisfaction of international students and their loyalty towards the service quality provided in UTHM. The specific objectives for this research are:

i.    To identify the most important factors of service quality provided from the perspective of international students that influence their satisfaction in UTHM.

ii.   To evaluate the relationship between service quality and UTHM international student's satisfaction.

iii.  To assess the impact of international student's satisfaction on their loyalty towards UTHM.

**1.6    Scope of the Research**

This research is focused on international students' perception of service quality and its relationship with their satisfaction, and the relationship between international students' satisfaction and their loyalty towards University Tun Hussein Onn Malaysia (UTHM). This study decided to measure service quality factors of

perspective international students to improve their satisfaction and loyalty towards UTHM University. Thus, respondents of this study are international students in this University. Therefore, a questionnaire is used to collect the data and SPSS and AMOS are used as simulation tools to analyse the obtained data.

## 1.7    Significance of Research

The results of this study provide new insight for the public higher education sector and UTHM in particular on the assessment of service quality. In addition, the study focuses on the relationship between service quality factors and international students' satisfaction, as well as on the relationship between the satisfaction and loyalty of the international students to give a deeper vision to researchers on these relationships. Moreover, the investigation of these relationships could help to determine which factors have more influence on the satisfaction of students in HEIs. Therefore, the university management can plan strategies to improve their services. Thus, UTHM's management could prepare strategies to enhance its services.

The findings of this study can help to understand how service quality affect student satisfaction and improve strategies to enhance their service in order to achieve high level of students' satisfaction, which can lead to attract potential students and retain existing student to the institutions. Also, it could contribute in terms of information provided by this study by investigating students' perceived value and satisfaction as lack of studies emphasizes value in higher education institutions, especially in public higher education institutions. This research is then essentially helpful to the University of UTHM's educational management in order to improve its service quality. Additionally, this research also assists stakeholders in designing plans for the measurements that need to be changed. Then, the results of this study can also add knowledge and assist the institution's educational management to improve the institution's operation.

**1.8    Structure of the Thesis**

The proposed thesis is being structured into five main chapters as follows:

Chapter 1:    Introduction

It offers an introductory view and context to the thesis by bringing into perspective(s) concerning the obstacles that aroused the researcher's interest. It went further by setting the target and priorities to accomplish the research tasks ahead; it also briefly mentioned the research methodology even although this sub-component is addressed in more details in chapter three of this thesis. This chapter also addresses research history, research problems, research challenges, ideas, objectives, goals and scope.

Chapter 2:    Literature Review

This chapter is intended to evaluate the magnitude of research efforts performed in specific fields of research. This chapter is referred to as contextual history, as it contains subheadings such as literature review, theoretical basis, conceptual background and structure for research evaluation. This chapter also reveals the conceptual framework and measuring objects adopted for the analysis.

Chapter 3:    Research Methodology

The suggested methodology adopted for this analysis is outlined in this chapter. This includes descriptions of the various methodological methods used to analyse data along with the method used to collect data. The originality of the sample to be replaced in this research work is clarified at this point for detailed exposure.

Chapter 4:    Descriptive Analysis and Structural Equation Modelling (SEM)

The chapter contains the descriptive analysis results including the pre-test and the pilot test as well as the demography analysis. Also, in this chapter the normality and exploratory factor analysis are discussed. The chapter presents the multivariate analysis using the Structural Equation Modelling (SEM-AMOS). The chapter will end with detailed critical discussion of results with previous literature as they agree or contrast.

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