

**SERVICE QUALITY AND SATISFACTION:  
STUDY ON INTERNATIONAL STUDENTS IN UNIVERSITIES OF NORTH MALAYSIA****Jalal R. M. Hanaysha., College of Business, Universiti Utara Malaysia**

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**Abstract**

Student (customer) satisfaction assessment is vital in determining service quality in Universities. In order to remain competitive the universities continuously acquire, maintain and build stronger relationships with students. Getting international students to Universities now become a mirage. To what extent the passed out and passing out students assess the quality of services offered by the university and spread it through word of mouth, that determine the international students interest to take admission in International Universities. The main purpose of this paper is to evaluate students' satisfaction on services provided by Universities in the Northern region of Malaysia. This particular study concentrates on passed out and passing out international students of 5 universities in the Northern part of Malaysia. These Universities are University Malaysia Perlis, in Perlis, Kolej Universiti Insaniah, in Alor Setar, Universiti Sains Malaysia, in Pulau Pinang, Albukhary International University in Alor Setar, Kedah and University of Utara, Sintok, Malaysia. The study made use of proportionate probabilistic sampling size (PPSS) to arrive at representative sample size. The study considered 320 students from all of these universities. The study observed significant relationship between the five dimensions of service quality (tangibility, reliability, responsiveness, assurance and empathy) or SERVQUAL and students' satisfaction. The findings generally indicate that the majority of students are satisfied with the facilities provided by UNIVERSITIES. Such findings should help the universities in the Northern part of Malaysia to make better strategic plan as to enhance students' satisfaction during their academic tenure and attract more students to respective universities.

**Keywords:** Satisfaction, SERVQUAL, performance, service quality.

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**1. Introduction**

The education of full-fee-paying international students has become of major importance for universities in Western nations, particularly in major English speaking destination countries. Barron (2005: 353) has suggested that "international education is one of Australia's largest industries" and that the fees generated by international students are important to the budgetary health of institutions. In the UK, according to HESA (2006) and UKCOSA (2004), about 320,000 or 13 per cent of students in 2004-2005 came from overseas, with about 10 per cent from outside the European Union (EU). This figure more than doubled from about 160,000 in 1994-1995. For some institutions, international students currently represent more than 25 per cent of their student population (UKCOSA, 2006). The main countries of domicile of international students in the UK are China (32,000 or 12 per cent) and Greece (9 percent), with at least a further 20 countries each providing more than 2,500 students. As far as tourism is concerned, equivalent total figures (UCAS, 2006) suggest that overseas students represent about

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16 per cent of acceptances onto programmes, rising from 11 per cent in 1996. Service quality is very important as it can become as one of an organization competitive advantage (Bigne et al., 2003). With such competitive advantages should enable universities to offer innovative curriculum, student learning environment besides reducing cost of doing business. In particular the purpose of this research is to determine the relationship between service quality and students' satisfaction at higher educational institutions in Malaysia.

## **2.1 Literature Review**

This section reviews the relevant literature on satisfaction and service quality, service quality dimensions, and relationship among them. The section defines and reviews customer satisfaction and service quality in order to get an idea about the research. No doubt that the some HEIs will win if they could provide high quality of services to their customers and in this case, the students (Tan et al., 2010). Moreover, government has developed a policy to use number of foreign students that a HEI possess as one of the said HEI Key Performance Indicators (KPIs).

Since Universities are competing to attract best students, then the ministry of Higher Education should strongly encouraged universities to conduct SERVQUAL assessment. To this extent, universities have become increasingly involved in defining service quality and measuring customer satisfaction in ways that are familiar to service marketing specialists (Gronroos, 1984; Kotler, 1985), who themselves were developing measures of service quality from the 1980s. As noted by Patterson et al. (1998) and Conant et al. (1985), the most important customers, namely students and their parents, and the university providers have progressively changed towards a customer service orientation. Against this background, there has been a rapid expansion in the literature about this aspect of service quality. However, the way in which it has typically developed – by identifying the attributes from consultation with the students and then evaluating these (Bourke, 1997; Gatfield et al., 1999; Joseph, 1998; Thompson and Thompson, 1996) – has meant that there has been a great diversity and lack of consistency in methodological strategies and in the variables employed to assess the service quality (Leonard et al., 2003). Some researchers in education have used SERVQUAL, which is the most popular model to measure service quality, sometimes specifically adapted for the education sector (Wright and O'Neill, 2002; Gatfield, 2000). Orr (2000) identified five groups of organisational determinants of success in the provision of fee-paying graduate courses. There is no doubt on the important to satisfy customer. Globalization has revolutionized both manufacturing and service sectors (Gruber et al., 2010). As a nation that is in the middle of transforming its economy which clearly emphasize on the importance of higher education as one the major sectors certainly requires consistent and continuous assessment made to all universities (public and private) in the country. This paper specifically focuses on topic of service quality of universities and its role as one of key strategic components to build competitive advantage.

### **2.1.1 Service Quality**

Highly satisfied customers are expected to spread a positive word of mouth about the institutions, thus attracting new applicants with lower marketing costs. In Malaysia, both private and public institutions of higher learning strive to provide quality services to its students in order to develop and maintain their reputation. To gain competitive advantages, efforts to adopt the quality management system philosophy are fast spreading within the higher education institutions (HEIs) in Malaysia (Sohail, Rajadurai, Rahman, 2003). Due to rapid competition in the service industry have made many organizations concentrate on meeting their stakeholders'

needs (Zammuto et al., 1996). This means, Universities should make similar approach as their survival, grow and prosperity is determined by students' satisfaction. O'Neill and Palmer (2004) view The quality of education is even difficult to define (Macukow, 2000). Some researchers believe that quality cannot be defined in any simple ways (Freeland, 1991; Becher, 1994). Due to this reason, researchers agree that there is no one best way to define and measure service quality (Clewes, 2003). However, there have been some early attempts made to define quality in higher education, Harvey et al (1992), have noted that higher education quality can be defined in many ways and that definition of quality in HE must be "Stakeholder Relative"; "defect avoidance in the education process", (Crosby, 1979); "Knowledge is the totality of quality education", (Reising, 1995); "Estimates of college quality are essentially faith-based", (Hersh, 2005); "the achievement of planned goals", (Cheng, 2003); "value addition in education", (Feigenbaum, 1983); "fitness of educational outcome and experience for use", (Juran and Gryna, 1988); "associated with elitism and the perceived excellence of university education", (Mai, 2005). A growing debate on the definition of quality in higher education has led to the suggestions that service quality should be defined based on student perceptions (Aldridge & Rowley, 1998; Mai, 2005).

Service quality in the field of higher education as "the difference between student expectation and perception against actual their actual experience. Aldridge and Rowley (2001) in particular suggested that the perceived service quality of students is an antecedent to student satisfaction. Hoffman and Bateson (1997) defined SERVQUAL as an attitude that is established by a long-term assessment on overall performance. Service quality is about delivery of excellent or high rate of service relative to customer or exceeds their expectations (Tahar, 2008). Parasuraman et al., (1985) defined service quality as a form of attitude that is related to customers' expectations and perceptions. The same agenda occurs to universities as building lasting relationships and providing quality service is very important too (Aldridge & Rowley, 2001).

### **2.1.2 Student Satisfaction**

In higher learning industry, students are the major customer for universities, which means success or failure of an institution is largely depends on its' student satisfaction. Sapri et al., (2009) mentioned that students' satisfaction is a short-term attitude that results from evaluation of their experience on education services that they had received. Kotler and Clarke (1987) defined satisfaction as the desirable outcome of a task or job that pleases one's esteem. According to Malik et al., (2010), satisfaction is the intentional performance which results in one's contentment.

There were researches on students' satisfaction that concerned with quality of courses and teaching (Mavondo, & Zaman, 2000, & Sapri, et al, 2009). No doubt that such measure of customer satisfaction is important for universities as it tells students need and expectations; such investigations should be considered as the basis of optimal characteristics of the service provided by UNIVERSITIES (Arambewela, 2008).

### **2.1.3 Service Quality and Customer (students) Satisfaction**

Service quality and customer satisfaction are basically two different issues but can be highly interrelated. Quality is seen as a general attitude, while satisfaction is related to particular transaction (Gruber et al., 2010 & Farrell et al., 2001) relate perceived quality as an antecedent to

satisfaction, while other authors (e.g. Parasuraman et al., 1988) view customer satisfaction as an antecedent to service quality. The majority of recent publications believe that service quality is an antecedent to customer satisfaction (Carrillat et al., 2007 & Zeithaml, et al., 2008).

According to Gruber, et al., (2010), if HEIs look at their students and understand how they perceive the services provided, then they should be able to improvise the quality of services provided better. According to Wiers et al., (2002), HEIs support facilities are important in students' satisfaction assessment. As a result of highly competitive marketplace, service quality and customer satisfaction became without any doubt the two basic concepts that are at the core of the marketing theory and practice. It is said that the key to sustainable competitive advantage lays in delivering high quality of service that in turn result to customer satisfaction (Gao & Wei, 2004).

Satisfaction is a function of relative level of expectations and perceives performance. The expectation may go as far as before the students even enter the higher education, suggesting that it is important to the researchers to determine first what the students expect before entering the university (Palacio, Meneses and Perez, 2002). In contrary, Carey, Cambiano and De Vore (2002), believe that satisfaction actually covers issues of students' perception and experiences during the college years. While most student satisfaction study focus on the perspective of customer, researchers is facing a problem of creating a standard definition for student satisfaction thus providing a need of customer satisfaction theory to be selected and modified so that it can explain the meaning of student satisfaction (Hom, 2002). Even though it is risky to view students as customer, but given the current atmosphere of higher education marketplace, there is a new moral prerogative that student have become "customer" and therefore can, as fee payers, reasonably demand that their views be heard and acted upon (William, 2002).

Carney (1994) Proposed comprehensive nineteen variables / attributes in studying a college's image i.e. student qualification (academic), student qualities (personal), faculty-student interaction, quality instruction (faculty), variety of courses, academic reputation, class size, career preparation, athletic programs, student activities (social life), community service, facilities and equipment, location, physical appearance (campus), on campus residence, friendly, caring atmosphere, religious atmosphere, safe campus, cost/financial aid. Although the variables were developed under the context of college image, most of the variables noted are highly relevant to the measurement of service quality.

Athiyaman (1997) used eight characteristics to examine university education services namely, teaching students well, availability of staff for student consultation, library services, computing facilities, recreational facilities, class sizes, level and difficulty of subject content and student workload. The author further noted that "consumer satisfaction is similar to attitude, but it is short-term and results from an evaluation of a specific consumption experience." (Athiyaman 1997, p.532). Lee et al (2000) explained that the two of the total quality experience variables 'overall impression of the school' and 'overall impression of the education quality' are the determinant variables in predicting the overall satisfaction. Brooks (2005) stated that the measurement of quality should encompass more university activities. The author recommends the following criteria to assess a quality of a university:- i. Reputation, ii. Faculty Research Productivity, iii. Student Educational Experiences and Outcomes: Program Characteristics: Counts of degree issued; financial support; fellowship grant support; teaching assistantship, Program Effectiveness: Timeline of their program; proportion of students; completing their

intended degree programme; Student Satisfaction: Classroom; co-curricular activities; interaction with faculty and peers; instructions; campus life; Student Outcome: Assessment of learning and career outcomes of educational programs.

An expectation that cannot be fulfilled on the institutions is the key factors for students' withdrawal (Alridge and Rowley, 2001). According to the study by Kanji, Abdul Malek and Wallace (1999) do give some insights on the real situation of the Higher Education Institutions in Malaysia. Most institutions do give a great deal of importance to meeting customers' expectations which is similar to business organization, but they still lack customer awareness among the staff, and it has become a common drawback for many institutions.

#### **2.1.4 Service Quality Dimensions**

Parasuraman, et al., (1985) found 10 dimensions of service quality, that include - tangibles, reliability, courtesy, responsiveness, security, competency, access, communication, credibility, and understanding. Later in 1988, they summarized these ten dimensions to five; tangibles, assurance, reliability, responsiveness, and empathy.

Tangibles refer to the appearance of physical factors such as equipment, facilities used by a service based company as well as to the appearance of service employees. Aspects in the tangibles factor are factors like 'up-to-date equipment', 'physical facilities are visually appealing' and 'materials are visually appealing. However, Jing et al., (2010), found that only three dimensions of service quality (tangible, responsiveness and empathy) have a significant relationship with students' satisfaction.

Empathy refers to caring and individualized attention that the firm provides to its customers. This means, organization should understand the problem of customers and results must favor customers with individual personal attention. Empathetic organizations shouldn't lose touch with customers. As such, empathetic organizations understand the needs of their customer and make their services accessible to them (Zeithaml et al., 2008; O'Neill & Palmer, 2003).

Meanwhile, assurance includes competence, courtesy, credibility and security. This dimension involves capabilities such as delivering services with respect, polite, and effective communication. Competence in particular refers to knowledge and skill of an organization in delivering services. Such knowledge and way to interact with customer should inspire confidence in an organization (Gao & Wei, 2004).

Reliability can be defined as the ability to perform the service in an accurate and dependable manner. It means that the company provides a service to its customers at a time without making any errors and delivers what it promised during the time that was agreed upon. Reliability is considered as the most important dimension of service quality (Zeithaml et al, 2008). However, Jing, et al., (2010), found reliability and assurance have not significant relationship against students' satisfaction.

The responsiveness Dimension relates to the willingness of the company to assist its customers in providing them with a good, quality and fast service. It means that the employees are ready to help customers and respond to their demand as well as to notify customers when service is available. If a service fails to occur, then the ability to recover quickly and professionally is important as it will create very positive perceptions of services provider. Gao & Wei (2004) conducted a research on Chinese business schools, and found that the schools do best in "tangibles" and worst in "empathy" and have no relationship with satisfaction. The results

show that only “reliability” and “responsiveness” have significant correlation with students’ satisfaction.

### **3.1 Problem Formulation**

Service quality is noted as commonly an important prerequisite in order to establish and sustain satisfying relationships with customers. In this concern, the relation between service quality and customer satisfaction has been emerged as a topic of considerable and strategic concern (Bolton and Drew, 1991; Cronin & Taylor, 1992). Generally, in this era, research suggests that service quality is an important indicator of customer satisfaction (Spreng & Mackoy, 1996). Service quality is one of the most important research topics on a large scale in services (Zeithaml 2000; Gallifa, & Batalle, 2010). The consumers are concerned not with how a service is delivered but only with the quality of output they receive. Quality perceptions of UNIVERSITIES influence student attitude toward the service. High levels of quality of service occur when the customer (students) perceives that the service provider exceeded his or her expectations. Customer satisfaction with a service is able to create long term benefits for the university including positive word-of-mouth, and customer loyalty (Anderson et al., 1994). According to Khan et al., (2011), there are very few studies available on the concept of service quality in academic institutions and those too don’t consider student’s willingness to put more efforts, and this research has been conducted to fill this gap.

### **4.1 Problem Statement**

Therefore, this particular research focuses on “**SERVICE QUALITY AND SATISFACTION: STUDY ON INTERNATIONAL STUDENTS IN UNIVERSITIES OF NORTH MALAYSIA**”.

### **5.1 Research Objectives**

This research is sought to achieve the following objectives:

1. To determine if there is a significant relationship between Tangibility and customer satisfaction.
2. To determine if there is a significant relationship between Reliability and customer satisfaction.
3. To determine if there is a significant relationship between Responsiveness and customer satisfaction.
4. To determine if there is a significant relationship between Assurance and customer satisfaction.
5. To determine if there is a significant relationship between Empathy and customer satisfaction.

### **6.1 Research Hypotheses**

H1: There may have a relationship between Tangibility and customer satisfaction.

H2: There may have a relationship between Reliability and customer satisfaction.

H3: There may have a relationship between Responsiveness and customer satisfaction.

H4: There may have a relationship between Assurance and customer satisfaction.

H5: There may have a relationship between Empathy and customer satisfaction.

### **7.1 Conceptual Definition**

**Service Quality:** the conceptualization of service quality has been seen as the difference between customer expectations about the service to be received and perceptions received from the service (Parasuraman et al., 1988). In some previous studies, service quality has been defined as the degree to which a service meets customers' needs or expectations (Mavondo & Zaman, 2000).

**Customer satisfaction:** it is defined as the end state of psychological process. Sapri et al., (2009) mentioned that customers' satisfaction is a short-term attitude that results from the evaluation of customers of their experience with the education service received. On the other hand, Kotler and Clarke (1987) defined satisfaction as the desirable outcome of a task or job that pleases one's esteem.

**Tangibles:** it relates to the physical cues that are a component part of the service delivery process (Zeithaml et al., 2000; O'Neill & Palmer, 2003).

**Reliability:** according to Xiaochen & Yuhong, (2010), reliability is the organization's ability to provide its customers with the service in an accurate and dependable manner. It means that the company provides a service to its customers at a time without making any errors and delivers what it promised during the time that was agreed upon.

**Responsiveness:** Parasuraman et al., (1985) defined responsiveness as this dimension as the willingness of the organization to provide assistance and prompt service to customers. It means that the employees of a service organization are ready to help customers and respond to their demand as well as to notify customers when service will be provided.

**Assurance:** Gao and Wei, (2004) relates assurance to the following features, which are competence to perform the service, politeness and respect for the customer, effective communication with the customer and general attitude that the server has customer's best interest at heart.

**Empathy:** According to Spreng et al., (1996), empathy refers to providing care and individual attention for customers. In this dimension, the organization understands the problems of customers and results in their favor, as well as customers with individual personal attention.

### **8.1 Operational Definition**

**Service Quality:** operationally defined as the degree of overall excellence of the university that meets students' expectations.

**Tangibility:** refers to the appearance of the physical university surroundings and facilities, equipment, personnel and the way of communication

**Reliability:** the degree to which the university provides the services accurately and in a dependable manner.

**Responsiveness:** the degree to which the university is willing to help its students in supporting them with a good, quality and fast service.

**Assurance:** it means that customer feel secure with knowledge and courtesy of university staff and their ability to portray trust and confidence among students.

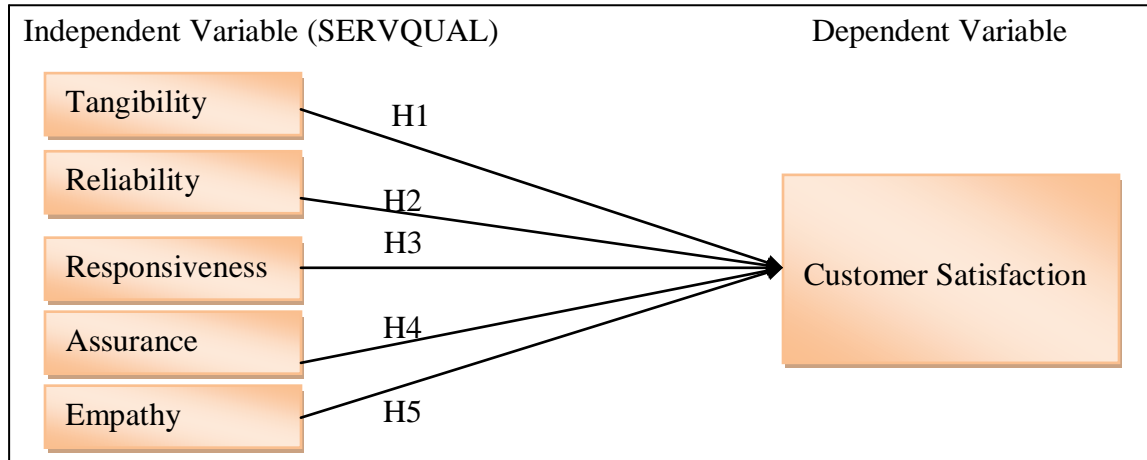
Empathy: The degree to which the university cares and gives individualized attention to its' students, to make the customers feeling extra valued and special.

Customer Satisfaction: it is a measure of how products and services provided by the university meet or exceed students' expectation.

### 9.1 Research Methodology

This research was adopted from Parasuraman's SERVQUAL dimensions. The dependent variable in this research is overall student satisfaction that is evaluated by the overall satisfaction at Universiti Utara Malaysia. The independent variable in this research is service quality which measures the level of customer satisfaction (student) satisfaction. The dimensions included in this variable are: tangibility, reliability, responsiveness, assurance, and empathy. This is shown in Figure 1.

**Figure 1: Research Framework**  
Assessing the Relationship between Service Quality and Customer Satisfaction at Higher Educational Institutions in Malaysia



#### 9.1.1 Population

The population for this research was students at University Malaysia Perlis, in perlis, Kolej Universiti Insaniah, in Alor setar, Universiti Sains Malaysia, in Pulau Pinang, Albukhary International University in Alor Setar, Kedah and University of Utara, Sintok, Malaysia, in the state of Kedah. Respondents consist of passed out and passing out international students.

#### 9.1.2 Research Design

This research is a cross sectional in nature where the purpose is to describe the level of students' satisfaction on facilities provided by the higher educational institutions in Malaysia, such as the educational service quality, faculty members quality, international student liaison quality, library services, housing and bus services on campus, class rooms, sport services etc including hypotheses testing to determine the relationship between service quality and students' satisfaction. The study follows descriptive study design as its plan of action.

#### 9.1.3 Sampling

The respondents of the sample were taken randomly from UNIVERSITIES considering their age, program or country of residence. The sample respondents for the study



were selected from the population by proportionate probabilities sampling size method after considering that all students will have the same treatment. Almost 100 students were contacted but only 320 were responded, meeting the criteria of research. This study is limited to particular UNIVERSITIES in the Northern region viz., Kedah, Pinang and Perlis region of Malaysia.

#### 9.1.4 Tools of Data Collection

The research will consider following tools for the data collection.

1. Questionnaire on Service Quality Dimensions.
2. Questionnaire on Customer Satisfaction.

### 10.1 Factor Analysis

**Table 1: Factor Analysis**

SI No	Factors	% of variance explained	Cronbach $\alpha$
1	Tangibles	0.5673	0.789
2	Reliability	0.6664	0.834
3	Responsiveness	0.3318	0.691
4	Assurance	0.3921	0.791
5	Empathy	0.7874	0.816
6	Customer Satisfaction (DV)	0.3040	0.791

Table 1 indicates the results of factor analysis. The entire factors (F1, F2, F3, F4, F5, and F6, that included in the factor analysis were found most important in explaining (0.5673, 0.6664, 0.3318, 0.3921, 0.7874, and 0.3040) the variance respectively. Based on the results, all the factors are there by selected for further analysis.

#### 11.1 Reliability Test

##### Reliability and validity of tools

Reliability test was conducted on the dependent variable (i.e., customer satisfaction), and independent variables- service quality factors (i.e., tangibles, reliability, responsiveness, assurance, and empathy). The values of Cronbach's alpha of the study variables are shown in table 1. As shown, the reliability coefficient of the study variables exceeded the minimum acceptable level of 0.60 (Nunnally, 1978). The results show the Cronbach's Alpha value for dependent variables, student's satisfaction, and for the independent variable; tangibility, reliability, responsiveness, assurance, and empathy are all above 0.7 which is considered as good, except responsiveness which is 0.691 but still considered as acceptable.

#### 12.1 Analysis of Results

This section discusses the results from data analysis obtained. The main purpose of this research is to examine the determinants influencing students' decision to study at UNIVERSITIES in Malaysia. The questionnaires were distributed to students that currently study in UNIVERSITIES. This research received 320 questionnaires from students with various nationalities. The respond represents 30% from total number of questionnaires being distributed.

In this research, Pearson Correlation Analysis and Hierarchical Multiple Regression were used and results are as indicated in the following section of descriptive statistics. The results indicate the mean of tangibility is 3.4063 or equal to 3. This means most of respondents agree with tangible dimensions. The mean for reliability is 3.5025 or equal to 4, and this also means that most of respondents agree with reliability dimensions. Meanwhile, the mean of responsiveness is 3.3492 or equal to 3, and this means that most of respondents agree with responsive dimensions. Meanwhile the mean of assurance dimensions is 3.6719 or equal to 4, and this also means that most of respondents agree with assurance dimensions. Furthermore, the results also show the mean of empathy which is equal to 3.3281 or equal to 3. This means most of respondents agree with empathy dimensions. Meanwhile, mean of students' satisfaction is 3.4917 or equal to 3. This also means that most of respondent are agree with services provided by UNIVERSITIES. As mentioned earlier, there are five hypotheses have been identified and addressed in this research.

*Hypothesis 1: There is a significant relationship between Tangibility and students' satisfaction.*

**Table 2: The Relationship between Tangibility and Students Satisfaction**

Model	R	R Square	Adj R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.531(a)	.282	.280	.49332	.282	124.771	1	318	.000

The relationship between Tangibility and Students Satisfaction was investigated using Pearson correlation coefficient. The result in Table 2 shows a weak correlation between the two variables ( $r=.280$ ,  $n=320$ ,  $p<.01$ ). This means that 0.280 of Student Satisfaction is determined by Tangibility. Thus, hypothesis 1 is accepted.

*Hypothesis 2: There is a significant relationship between Reliability and students' satisfaction.*

**Table 3: The Relationship between Reliability and Students Satisfaction**

Model	R	R Square	Adj R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.707(a)	.500	.498	.41170	.500	317.725	1	318	.000

The relationship between Reliability and Students Satisfaction was investigated also using Pearson correlation coefficient. The results in Table 3 clearly indicate a moderate correlation between the two variables ( $r=.498$ ,  $n=320$ ,  $p<.01$ ). This means that 0.498 of Students satisfaction is determined by Reliability. Thus, hypothesis 2 is accepted.

*Hypothesis 3: There is a significant relationship between Responsiveness and Students Satisfaction.*

**Table 4: The Relationship between Responsiveness and Students Satisfaction**

Model	R	R Square	Adj R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.712(a)	.507	.506	.40860	.507	327.432	1	318	.000

The relationship between Responsiveness and Student Satisfaction was investigated using Pearson correlation coefficient. The result in Table 4 shows a very strong positive correlation between the two variables ( $r=.506$ ,  $n=320$ ,  $p<.01$ ). This means that 0.506 of Students Satisfaction is determined by Responsiveness. Thus, hypothesis 3 is accepted.

*Hypothesis 4: There is a significant relationship between Assurance and Students Satisfaction.*

**Table 5: The Relationship between Assurance and Students Satisfaction**

Model	R	R Square	Adj R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.590(a)	.348	.346	.47011	.348	169.566	1	318	.000

The relationship between Assurance and Students Satisfaction was investigated also using Pearson correlation coefficient. The results in Table 5 indicate a weak correlation between the two variables ( $r=.346$ ,  $n=320$ ,  $p<.01$ ). This means that 0.346 of Students Satisfaction is determined by Assurance. Thus, hypothesis 4 is accepted.

*Hypothesis 5: There is a significant relationship between Empathy and Students Satisfaction*

**Table 6: The Relationship between Empathy and Students Satisfaction**

Model	R	R Square	Adj R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.692(a)	.479	.478	.42001	.479	292.843	1	318	.000

The relationship between Empathy and Students Satisfaction was investigated also using Pearson correlation coefficient. There result in Table 6 shows moderate correlation between the

two variables ( $r=.478$ ,  $n=320$ ,  $p<.01$ ). This means that 0.478 of students satisfaction is determined by Empathy. Thus, hypothesis 5 is accepted.

From the above results and analysis, it is clearly established that there is significant relationship exists between service quality and the level of students' satisfaction in Universities. A detailed discussion is made based on the sub variables of service quality in relation to student satisfaction below.

### 13.1 Discussion

The Research results show that the five dimensions of service quality (tangibility, responsiveness, reliability, assurance and empathy) have strong relationship with students' satisfaction. The finding is consistent with the finding by Bigne et al., (2003) that found there is a significant relationship between service quality and student satisfaction. This research shows that assurance has a weak relationship with students' perception of service quality provided by the university. This indicates a weak relationship between the two variables. This is consistent with the results found by Hasan and Illias, (2008), they were proved that assurance is significantly correlated with students' satisfaction

This study also shows that responsiveness has the strongest relationship with students' satisfaction. The result is consistent with Gao and Wei, (2004) who conducted a study on Chinese business school and found that responsiveness is significantly related to student satisfaction. While, Tan et al., (2010) found that there is no significant relationship between responsiveness and student satisfaction. The difference in the results might relate to the changes in educational system or the place where study has been conducted.

In terms of reliability, this study shows that it has a moderate significant correlation with students' satisfaction. The results are similar to Zeithaml et al., (2000) and Khan et al., (2011) finding who found that reliability has a significant relationship with student satisfaction. Similarly, this study shows that empathy also has a moderate correlation with student satisfaction. This means that students are satisfied with the staffs' attention and care in regard of solving their problems. The result is consistent with the finding by Bigne et al. (2003) and Hasan and Illias, (2008) that found a significant relationship between empathy and student satisfaction. On the other hand, the study found that there is a weak relationship between tangibles, and students' satisfaction towards the service provided by UNIVERSITIES. While, Khan et al., (2011) and Tan et al., (2010) found that tangibles has no significant influence on students' satisfaction. The explanation is possibly might be because both the facilities and equipment are not the main concern for the students in the process of education. On the other hand, presumably with the adequate existing facilities, it does not prompt the students to think of physical or tangibles as the necessity infrastructure for the process of education.

The above discussion on independent variable (service quality) in relation to dependent variable (student satisfaction), clearly establishes significant correlation of service quality and satisfaction. In this context, the university should consider seriously the effect of service quality to procure more students from different countries and geographical locations.

### **14.1 Managerial Implication**

In dynamic competitive environment, managers should recognize the importance of student satisfaction to the HEIs. Managers should integrate strategic insight in their planning by considering the context, content and process of building most favorable decisions. It is very important for managers to look forward as it will enable them to anticipate better plans. By doing so, HEIs will be able to grow internationally and gain competitive advantage. These are due to the needs that all universities should understand student expectations to endow them with a suitable learning environment. Given the student variety, universities will have to adjust teaching methods to include non-traditional teaching techniques to outfit contemporary specific academic demands of students. We assume that interaction with lecturers is considered to be an important component of the learning experience and lecturers are accepted as the standard point of contact for all students. Therefore, students should have easy access with their lecturers not only to look for their academic issues, but also acquire best direction as guide to excel in their study. The international students expect minimum standard that should be met by the Universities in Malaysia. These facilities include both academic and non academic. The Universities should be able to cater the comfort and satisfaction of international students to attract more students from across countries. Lower the level of satisfaction, less number of international students can be attracted towards the country.

### **15.1 Future Research**

This research was conducted to determine the student's perception of the service quality towards the services provided by UNIVERSITIES. Future research should concentrate on the effect of determinants influencing postgraduate students' decision to study in UNIVERSITIES. Although the research findings of this research provide some new insights to researchers, these findings should be viewed in light for further research. Moreover, recommendations are suggested for further research for the purpose of enhancing the study of the students' perceived service quality since the university is working hard to become the eminent management university.

### **16.1 Conclusion**

The research findings suggest that students are satisfied with services provided by UNIVERSITIES. The process to determine and assess students' satisfaction on educational experiences they received is not easy but findings of this research are very useful in helping UNIVERSITIES to further improve its quality of services especially on factors received low rate of satisfaction. However and sometimes negative feedback are not taken openly by UNIVERSITIES staff and this will lead to slow or no improvement actions being taken.

So, to improve the level of students' satisfaction requires UNIVERSITIES to focus on all the dimensions of SERVQUAL. Furthermore, to ensure high quality services provided at all time requires them to conduct continuous SERVQUAL assessment. This can be done through implementing and formulating an effective service quality policy. Such policy should be comprehensive and capable to ignite continuous improvement on service quality at UNIVERSITIES.

Successful HEIs will receive better quality students for both which are local and international. It is not impossible for UNIVERSITIES to be on the list of top universities in the region as well as in the world. Well plan strategies, committed and discipline strategies execution and truthful in conducting strategies evaluation should become an integral part of their business conducts.

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