



**STUDENT SATISFACTION IN SELECTED MALAYSIAN
UNIVERSITIES: SERVICE QUALITY AS
DETERMINANT IN THE QUEST FOR
HIGHER EDUCATION**

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ABSTRACT

The present study discusses factors influencing students' satisfaction in Malaysian universities. The main purpose of this study was to conduct an in-depth, comprehensive study on the factors that influences graduate's satisfaction studying in Malaysian's universities in Kuala Lumpur and Selangor region. Further, the study focused in understanding how the perception of graduate student satisfaction towards the quality of the services delivered in the university. The study employed a quantitative research approach, whereby 121 respondents were drawn from organizations in Malaysia. Using SPSS version 22, multiple regression analysis was carried out on one dependent variable (Y) and 7 independent variables (x1, x2, x3, x4, x5, x6, and x7). The results of the multiple regressions shows that there exist a positive relationship between the dependent variable (Y) which is overall students satisfaction and the other seven variables which are; academic aspects, non-academic aspects, program issues, access, reputation, design, delivery and assessment and group size. The chief limitation of the study was the sample size and scope. In addition, there might be other service quality variables that were not included in this research; language barrier was a challenge as not all international students understood the language well. The present research is a pioneering research work that has not yet been studied before to the best of the author's knowledge. Several implications of the research to academicians, government officials and practitioners were further discussed. Universities seeking to boost their student's population must boost both their staff moral together with that of students by providing qualified tutors and lectures who understand their role properly.

ABBREVIATIONS AND ACRONYMS

SERVQUAL—Service Quality

SS- Student Satisfaction

HEdPERF- Higher Education Performance

HEIs—Higher Education/Learning Institutions

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

In the current cutthroat competitive world, organizations need to embrace some competitive mechanism and advantage in order to thrive and sustain themselves. In order to ensure their competitiveness, customer loyalty and satisfaction plays a vital role and acts important tools in the achievement of that competitive niche. An organization is supposed to pay more attention on the service quality that is useful in assisting an organization to distinguish itself from other organizations and enjoys its competitive advantage (Moore, 1987). According to Owlia and Aspinwall (1996), for the organization to embrace total quality approach, they should be committed in “Delighting the customer”. A customer is identified as an individual or organization which actually makes a decision to purchase while on the other hand, a consumer is referred to as an individual or an organizational segment which consumes or uses a product (Stanton et al., 1994).

Underpinning to the higher learning institutions (HEIs), it would be considered difficult to manage the institutions as from the marketing standpoint. Customer in this sector is not definitely identified. “Unlike other service industries, which hold satisfaction as a goal in and of itself, colleges and universities typically perceive satisfaction as means to end. Higher education tends to care about student satisfaction because of its potential impact on student motivation, retention, recruitment efforts, and fundraising” (Schreiner, 2009, p.1).

Furthermore, “Even though satisfying the wants and needs of customers of is not a new organizational concept for business institutions, customer orientation has been underemphasized in universities compare to profit-oriented organizations. Students are the “customers” of a university” (Huang, 2009, p.3). Students are universities’ assets and their satisfaction makes them potential in the current competitive market while at the same time adding referrals to the university.

In the recent years, Malaysian universities have been facing an increasingly competitive environment. In an increasingly competitive market for local as well as international students, institutions need to provide optimum services that are effective and efficient. International education marketing to international students should be managed to enhance consumer satisfaction, and raise perceived quality. Among the main precursors to these changes as identified by Fram and Camp (1995) are: an alteration of the demographic structure, socio-economic changes, the development of the new information and communication technologies (ICTs), the new knowledge society and the debate over the role of education, of human capital and of scientific research in our societies. These factors are engendering a new reality for higher education and for institutions that provide this service.

Consequently, critical and impressive changes have been taking place in the Malaysian higher education system within the recent years. The policies and programs embarked have gradually adopted the internationalisation system thus, growing the institutions' competitiveness while heightening the relationship between universities and other organisations (Vilalta, 1999). These changes, together with a questioning of the functionality and performance of university institutions, an increase of society's expectations with respect to the performance of public universities, as well as an increase in the demands of the various users of these services have resulted in a concern to improve the quality of teaching, research and all services that universities' provides (Capelleras and Veciana, 2001).

Additionally, as Seymour (1993) advised, developing students who are satisfied is supposed to be the core objective of the higher education. It is crucial to develop student satisfaction at all university levels in order to achieve its strategic objectives. Students should be viewed as the institutions' customers and universities need to be aligned as businesses (Waugh 2002).

For this purpose, more researches are needed to be conducted on the student satisfaction coupled with service quality in the university.

1.2 UNIVERSITIES IN MALAYSIA

A university is an institution of higher education and of research, which grants academic degrees at all levels (bachelor, master and doctor) in a variety of subjects, (www.experiencefestival.com/a/University/id/2033074).

Higher education in Malaysia is comprised with both universities and colleges offering a range of accredited programs both locally and internationally at undergraduate and graduate levels. Malaysia had a total of 64 universities (20 public universities, 37 private universities and seven foreign universities). Currently, Malaysia had a total of around 12, 000 by 2010 with PHD holders, while those who enrolled with the doctoral programs either in Malaysia or abroad were about 17,000. Consequently, the country targets to produce 48,000 PhD holders by 2020 and a total of 60,000 by 2023, (<http://www.etauau.com/edu/IndexUniversity.htm>).

More so, there are various degree programs which as offered in Malaysia and covers numerous academic fields such as Accounting, Architecture, Arts, Biotechnology, Business Administration (Marketing, Finance & Banking, General Management, Hotels & tourism, international business, and more majors at business schools and colleges), applied chemistry, economics, education, engineering (as well as Nano, Aerospace, Automotive, Manufacturing Engineering), information technology, law, mass communications and journalism, medicine, music, nursing science, risk management, science and technology, and many more (<http://www.oum.edu.my/oum/v3/>).

1.3 PROBLEM STATEMENT

Understanding internal strength and weakness together with external opportunities and threats is paramount to every higher learning institution. Presently the numbers of students in Malaysian universities and HEIs have increased rapidly over the past several years (Comrey, 2013). Some universities managed to attract a large share of students, while other universities struggled in that area. Adoption of internationalisation system of education has wooed many international students to study in Malaysia. However, these graduate students hail from distinct countries having different cultural and behavioural

backgrounds. This implicates their perception as well as their expectation as they are unique. Therefore, their degree of satisfaction may differ in response to the service offered in the universities and HEIs. Hence, a research is highly needed to study the factors that influence international students in their quest for universities and higher learning institutions (HEIs) in Malaysia while exploring the correlation posed by service quality variables and student satisfaction among the graduate students (Comrey, 2010).

Universities and institutions of higher learning are not only competing for the local students, they try to position themselves strategically among other universities in Asia and across the world. Viewing the entire world from a single market perspective whereby every university is a competitor, it shows how higher education is competitive. Thus, student satisfaction has a great role to play for the university competitiveness and success. Service delivery is considered as a critical factor that enhances value while simultaneously influencing the success of the institution positively (Berry, 1995). The perception student has about satisfaction acts as a vital tool in enhancing service quality in the universities.

1.4 RESEARCH OBJECTIVE

The core purpose of this study was to conduct an in-depth, comprehensive study on the factors that influences graduate's satisfaction studying in Malaysian's universities in Kuala Lumpur and Selangor region. Specifically, the research measured how the overall satisfaction of the student was influenced by the service quality (SERVQUAL) dimensions which included: academic aspects, non-academic aspects, group size, design, delivery and assessment, access, reputation and program issues.

Below are our specific research objectives:

1. To investigate the relationship between academic factor and overall student satisfaction.
2. To examine the relationship between non-academic factors and overall student satisfaction.

3. To probe the relationship between program issues and the overall student satisfaction.
4. To inspect the relationship between access factors and student satisfaction
5. To examine the relationship between reputation of the university and overall student satisfaction.
6. To study the relationship between design, delivery and assessment factors and overall student satisfaction.
7. To examine the relationship between group size factors and overall student satisfaction.

1.5 RESEARCH QUESTIONS

The study was conducted to identify the correlation between the variables or dimensions in service quality and how they influenced the overall graduate's student satisfaction (SS) of the student studying in universities in Malaysia. This study was guided following these research questions:

1. What is the relationship between academic factors and overall student satisfaction?
2. What is the relationship between non-academic factors and overall student satisfaction?
3. What is the relationship between program issues and the overall student satisfaction?
4. What is the relationship between access factors and student satisfaction?
5. What is the relationship between reputation of the university and overall student satisfaction?
6. What is the relationship between design, delivery and assessment factors and overall student satisfaction?
7. What is the relationship between group size factors and overall student satisfaction?

1.6 THE SCOPE OF THE STUDY

The study focused in understanding how the perception of graduate student satisfaction towards the quality of the services delivered in the university. The survey was conducted in the universities in Malaysia. The target population of this study was the graduate students who are studying in Malaysia. Therefore, graduate students who are currently studying in other countries' universities but residence in Malaysia are beyond the scope of this study.

1.7 LIMITATIONS OF THE STUDY

The study was not short of limitations and they include:

-) The study did not represent the entire population of the students who are studying in Malaysia and therefore, the chief limitation was the sample size and scope.
-) The research was conducted among the students who are studying in several universities within Kuala Lumpur and Selangor states, comprising of both public and private universities. Students' who were targeted to participate hailed from Universiti Malaya, Universiti Pertahanan Nasional Malaysia, Kolej Universiti Metropolitan Kuala Lumpur and Universiti Terbuka Malaysia (Kuala Lumpur state) while Universiti Teknologi MARA, Universiti Islam Antarabangsa Malaysia, Universiti Selangor and Universiti Taylor (Selangor state). While this study provided broad mix of respondents from the participants, the results was not generalized so as to represent the whole population of all universities in Malaysia offering graduate student programs.
-) The research was conducted among students who were studying in the universities that are in or near these two regions: Kuala Lumpur and Selangor. Thus, the study was not so applicable and effective to represent the other parts of Malaysia.
-) There might be other service quality variables that were not included in this research.

-) The research was conducted entirely in English. This eliminated the essence of translation needs in the survey questions; language was also another limitation to the study. Nonetheless, as the targeted universities are not using Malay as their language, there was the likelihood of interviewing any potential student.

1.8 SIGNIFICANCE OF THE STUDY

As competition intensifies around the world mainly in the education arena, delivering quality services that satisfy the students is a key for the institution's success. This study was conducted in order to determine the relationship between service quality and student's satisfaction among the graduate studying in Malaysia. The findings in this study may benefit both the students and university. Students were able to make informed decision while choosing the program to enroll with and in which university will he/she achieves that maximum satisfaction. The findings in this study was related to student's satisfaction and the service quality in the university, which will consequently serve as a parameter of developing the quality of services in relations to the variables identified as academic aspects, non-academic aspects, group size, design evacuation and assessment, access, reputation and program issues.

More so, the study also assisted the universities to understand the level of student satisfaction and identify which dimensions are of much importance, while at the same time helping the university to craft policies and programs which will enhance most student satisfaction. Additionally, the findings in this study will also assist universities in Malaysia to be able to serve their students more effectively in the future coupled with the development of the service quality with an aim of increasing the level of student satisfaction. The findings will also be used as a tool by both local and international students who are willing to enrol for their University's programs in Malaysia.

CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

This chapter explored the concepts, the past studies and numerous literatures that are related to service quality, service quality dimensions and the student satisfaction that will help while measuring the quality of services and student satisfaction in higher learning institutions (HEIs).

2.2. CONCEPT OF SERVICE QUALITY

2.2.1. Service

A service is intangible equivalent of an economic good. The provision of service is mostly an economic activity where the buyer does not generally, except by exclusive contract, obtain exclusive ownership of the thing purchased (Harmon, 2014).

Contemporary, Kotler *et al.* (1996) defined service as “An activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product”.

Also, “Service is a critical driver of customer retention and profitable growth” (Query *et al.*, 2007, p.152).

2.2.2. Quality

“Quality has no specific meaning unless related to a specific function and/or object. Quality is a perceptual, conditional and somewhat subjective attribute” (Kumar, 2012).

According to Drucker (1985), “Quality in a product or service is not what the supplier puts in. It is what the customer gets out and is willing to pay for”. Quality entails

the comparison of performance and expectation, (Parasuraman *et al.*, 1985). More so, Crosby (1979) notes that, “Quality is conformance to requirements”.

2.2.3. Definition of Service Quality

The concept of Service Quality is connected with the concepts of expectations and perception. Service quality is perceived by the consumers as the result of comparing the expectations and wishes of the service they are anticipating to receive coupled with the expectations they had on the company’s actions (Parasuraman *et al.*, 1988; Gronroos, 1994).

Service quality is defined by Kasper *et al.* (1999) as the extent to whereby the service, the service organization and the service process can satisfy the expectations and perception of the user.

Sasser *et al.* (1978), identified at least seven service attributes that are believed to have exhaustively embrace the concept of service quality. These include:

-) Security- confidence as well as physical safety;
-) Consistency- receiving the same treatment for each transaction;
-) Condition- of facilities;
-) Availability- spatial and temporal customer access to services;
-) Attitude- politeness;
-) Completeness- the availability of ancillary services;
-) Training- of service providers;

(Cited in Kitchroen, 2004)

However, there is a substantial debate on the mechanism and the best way of defining service quality in the higher learning institutions (Becket &Brookes, 2006). As Cheng and Tam (1997, p.23) posits “Education quality is a rather vague and controversial concept”. There are numerous ways of defining quality in higher learning. It depends on the general corporate culture of the university and the stakeholders’ commitment of quality. In this aspect, stakeholders in higher learning institutions include students, their parents, government, society and the local community (Harvey and Green, 1993). Service

quality of the higher education is the inimitability of experiences student involve in their entirely personal development process (Roland, 2008).

However, Shank et al., (1995) founds that “Universities are increasingly finding themselves in environment that is conducive to understanding the role and importance of service quality.”

2.3. THE DETERMINANTS AND MEASURING INSTRUMENTS OF SERVICE QUALITY

2.3.1. SERVQUAL

Parasuraman *et al.* (1985) identified SERVQUAL as a determinants and measuring instrument of service quality. This is mostly regarded as the best genesis of offering essential and detailed information pertaining to service quality. In connection to this, they defined the “determinants of service quality as a measure of how well the service level delivered matches customer expectations”. This study of SERVQUAL was based and designed in America and in their research; they described ten determinants of service quality. These include: reliability, responsiveness, access, competence, courtesy, credibility, communication, security, tangibles and an understanding the customers.

1. Reliability: It is the ability and willingness of a person/ institution to perform and conduct the promised service accurately and dependably.
2. Responsiveness: It is the readiness and/or willingness of employees to assist customers and to offer prompt service and timeliness of service.
3. Access: It is the ease of being contacted and the approachability.
4. Competence: It is the possession of the required skills and knowledge to perform service.
5. Courtesy: It refers to the respect, politeness, friendliness and consideration, shown to the consumers by the contact personnel.
6. Credibility: It includes trustworthiness, honesty and believability.
7. Communication: It is the ability to listen to the customers as well as being able to inform them using the appropriate language that they will understand best.

8. Security: It refers to the freedom from risk, danger and doubt that entail physical safety, confidentiality and/or financial security.
9. Tangibles: This is regarded as the state of facilitating good, appearance of physical amenities, physical condition of the buildings and the environment as well as the tools and equipment used to provide the service.
10. Understanding/ knowing the customer: This includes trying to understand the consumer's needs and specific requirements, recognizing regular client together with providing individualized attention.

Parasuraman *et al.* (1988) later reduced these ten determinants to five attributes. Thus, the model of SERVQUAL changed to be reliability, responsiveness, empathy, assurance and tangibles as cited in Milne and McDonald, (1990).

1. Reliability: It is the ability to perform the promised service dependably and accurately.
2. Responsiveness: It is the willingness and/ or readiness of employees to help customers and to provide prompt service, timeliness of service.
3. Empathy: The provision of caring, individualized attention to customers.
4. Assurance: The knowledge and courtesy of employees and their ability to convey and confidence.
5. Tangibles: It is the state of facilitating good, physical condition of the buildings and the environment, appearance of physical facilities, tools and equipment used to provide the service.

From the moment this model of SERVQUAL was developed, criticisms have been open unto this model. Among the main criticisms to the instruments' attributes involve the validity of the identified five service quality attributes, the length of the questionnaire and the predictive power of the instrument in regard to subsequent consumer purchase (Hoffman and Bateson, 2006).

More so, there have been many authors who have noted that the dimensions applied in the SERVQUAL model lacks generality (Carman, 1990; Mc Alexander *et al.*,

1994; Iwaarden & Wiele, 2002), that the administration of the expectation items are not necessary (Carman, 1990; Babakus & Boller, 1992). Cronin and Taylor (1992) also denied the paradigm of SERVQUAL and consequently proposed another new service quality model “SERVPERF” that is used to measure only the performance without including the expectations. They asserted that their SERVPERF model performs better off than any other measure or model of service quality. Teas (1993) in his paper, *Expectation, performance evaluation and consumers’ perceptions of quality*, discussed the operational and conceptual difficulties of using the ‘expectations minus performance’ approach putting much emphasis on the attributes of expectations. He developed two substitutes of service quality measures and identified them as evaluated performance (EP) and Normed Quality (NQ). He further noted that the EP instrument that measures the gap between ideal standards and the perceived performance rather than the client’s expectations, outperformed both NQ and SERVQUAL mechanisms (Cited in Firdaus, 2005).

2.3.2. HEdPERF (Higher Education Performance)

Firdaus (2005) in his paper *The development of HEdPERF: a new measuring instrument of service quality for the higher education sector*, developed HEdPERF (Higher Education Performance), a new instrument and mechanism to service quality which captures the reliable determinants of service quality within the higher learning sector. He projected a 41 item instrument that was empirically tested for reliability, unidimensionality and validity while using both the confirmatory and exploratory factor analysis (CFA). He expounded the results from his survey to be essential since the previous studies that were used in measuring the service quality were not entirely adequate and enough to assess and evaluate the perceived quality in higher learning institutions. In addition, previous studies were seen to be narrow and shallow which are over emphasizing on the quality of academics aspects while ignoring to pay attention and/or paying little attention on the non-academic aspects that are experienced in the educational sectors.

Firdaus constructed the HEdPERF model by comparing it with SERVPERF (SERVPERF-HEdPERF) so as to identify and modifies both the advantages and disadvantages applicable to each model and instrument and then constructing the most

superior instrument. SERVPERF has been another instrument of measuring service quality that was developed by Cronin & Taylor (1992). Cronin & Taylor (1992) criticized the framework of SERVQUAL and developed their own model “SERVPERF”, consisting of 22 items, and kept only the perception of service quality. Firdaus further categorized these dimensions into 5 determinants of service quality within the higher education sector. They are academic aspect, non-academic aspect, program issues, access and reputation.

1. **Academic aspects:** It consists of the items that describe the factor that are solely the responsibilities of academics (instructor).
2. **Non-academic aspects:** This aspect relates to the duties that are carried out by non-academic staff.
3. **Program issues:** It includes the item related to program flexibility, offering wide range of programs/ specialization, and quality program.
4. **Access:** It includes issues as approachability, ease of contact, availability and convenience of academic and non-academic staffs.
5. **Reputation:** The factor consists of the item that is important for higher learning institutions in projecting a professional image

Brochando (2009), in his study observed the performance of five alternative measures of service quality in the higher learning sector- SERQUAL, Importance-Weighted SERVQUAL, SERVPERF, Importance-Weighted SERVPERF and HEdPERF. He gathered the data through the administration of a structured questionnaire which were containing the perception instruments improved from the HEdPERF and SERVPERF scales and expectations items with those one identified from the SERVQUAL scale, and critically modifies both of them to be in line with the higher education sector. His data was collected with a sample of 360 graduate students in a Portuguese university in Lisbon. He found out that, HEdPERF is the best measurement proficiency of measuring service quality in the institutions of higher learning.

2.4. CONCEPT OF STUDENT SATISFACTION

2.4.1. Definition of Satisfaction

According to Hunt (1977), “Satisfaction is a consumer’s post purchase evaluation of the overall service experience (process and outcome). It is an affective (emotion) state of feeling reaction in which the consumer’s needs desires and expectations during the course of the service experiences have been met or exceeded.”

Also, “Satisfaction is a post choice evaluation judgment concerning a specific purchase decision, on the other way it can be approximated by the equation: satisfaction = perception of performance – expectations” (Oliver & Richard, 1980, p.482).

Additionally, Giese and Cote (2000) notes that, “Satisfaction is a summary, affective and variable intensity response centered on specific aspects of acquisition and/or consumption and which takes place at the precise moment when the individual evaluates the objectives” (p.3).

Zeithaml *et al.* (2012) defined satisfaction as an overall perception, attitude or judgment on the superiority of service. The judgment is inclined on the difference between expectations and actual experiences of consumer.

2.4.2. Definition of Student Satisfaction

The term “student satisfaction” could be explained various ways. Kaldenberg *et al.* (1998) discussed and outlined that in the higher learning institutes, student satisfaction was driven by assessing the quality of the coursework together with other curriculum activities as well as other factors and issues related to the university. Lecturers need to treat students with sympathy and sensitivity while assisting at all expenses by providing them with necessary and adequate services. In this case, even a simple listening ability is appreciated (Bateson, 2012). Grossman (1999) argued that student should be treated just as a client or a customer within the university and in that case, the university serves the students on a better priority in order to fulfill their needs and expectations.

Hence, Elliot and Healy (2001) proposed student satisfaction is a short-term attitude that is derived from the valuation of the education service received.

2.5. THE RELATIONSHIP BETWEEN THE SERVICE QUALITY (INDEPENDENT) AND THE STUDENT SATISFACTION (DEPENDENT) IN THE HIGHER LEARNING INSTITUTIONS

From the previous studies of conventional retailing conducted by Cronin (2000) and Johnson and Fornell (1991) have identified that service quality definitely influence the consumer's satisfaction. In the same way, several studies that were done by Wang *et al.* (2004) in telecom industry in China, and Kim *et al.*, (2004), Tung (2004), and Turel and Serenko (2006) within the mobile services industry in South Korea, Canada, and Singapore supported that service quality optimistically influenced customer satisfaction (Cited in Kuo *et al.*, 2009).

There are also several studies which were done in past which indicates that various service quality in the higher education sector leads to student satisfaction. Firdaus (2005) pointed out the academic aspects, non-academic aspects; access, program issues and reputation are determinants of service quality in higher education sector. Poister (2013) detailed Delivery and Assessment, Design Academic facilities, Non-academic facilities, Guidance, Recognition, Study opportunities, Student representation and Group size are the eight attributes that assist in determining the service quality of the higher education. Bitner & Zeithaml (1996) have argued that the communication skills among teaching staff, the effective relations and coordination between staff and students is paramount in assisting students to achieve their study objectives and leads to intensified student satisfaction. Kuh and Hu (2001) also claimed that effective and mutual relations between the student and the faculty are a strong gauge to student satisfaction. Kara and DeShields (2004) theorized that college performance, advising staff performance, and classes would influence students' academic experience and which in turn would influence the student satisfaction. Novarro *et al.* (2005) studied the Spanish University students and noted the service quality variables to be teaching staff, courses administration, and teaching methods are the prime factors in the achievement of student satisfaction with specific and short-term programs. They also illustrated that the teaching staff, enrolment, and course organization are the elements that impact student satisfaction with summer courses, and facilities being a potential determinant of student satisfaction. Delaney

(2005) reported that academic staff, academic experience, residential life, social life on campus, personal development opportunities, student service and resources were the service quality that lead towards the student satisfaction. Mai (2005) conducted a research on the student satisfaction in higher education and its influential factors. In his analysis, he found that the overall impression of the school, overall impression of the quality of the education, the quality and accessibility of IT facilities, teacher expertise and their interest in their subject and the prospects of the degree furthering students careers were the most influential predictors of the student careers were the most influential predictors of the student satisfaction. Helgesen and Nettet (2007) propose that satisfaction need to have positive relationship with student's perception of the university's reputation.

Brochado (2009) identified that HEdPERF, distinguished academic aspects, non-academic aspects, access, program issues, and reputation in higher educational service, had high correlation with overall satisfaction, future visits and intention to recommend the university to a friend. Huang (2009) also found that HEdPERF service quality sub-variables like academic aspects, access, non-academic aspects are much more superior to determine the student satisfaction of Xiamen University of China. (Huang, 2009, p.38)

2.6. DEMOGRAPHIC FACTORS RELATED TO THIS STUDY

Demographic factors consist of gender, age, ethnic group, tuition fee sponsors, terms and university category. Demographic characteristics are most often used as the basis for market segmentation and also affect the extent to which a person uses products in a specific product category (Pride and Ferrell, 1997).

In this research one of the demographic variables "tuition fee sponsor" was tested as a research question. It was developed on the basis of Hofstede (1997) as an outcome of one of the dimensions of cultural values. The dimension is individualism VS collectivism. According to Hofstede (1997), the members of the culture define themselves apart from their group membership. In individualist cultures, people are expected to develop and display their individual personalities and to choose their own affiliations. In collectivist cultures, people are defined and act mostly as a member of a long term group, such as the family, a religious group, an age cohort, a town, or a profession, among others (<http://www.wikipedia.org>).

The researcher assumes the student who pays their tuition fee themselves is more likely to fall into the category of individualist and the student who gets tuition fee paid is likely to fall into the category of collectivist. Furrer *et al.*, (2000) attempted to link Hofstede's cultural dimensions with the SERVQUAL dimensions. They found that in cultures with high degree of individualism, respondents reported wanting a higher level of service quality. Donthu and Yoo (1998) examined the relationship of the SERVQUAL dimensions with Hofstede's classification of culture in banking industry across four countries – U.S., Canada, UK, and India. They found that SERVQUAL dimensions varied considerably across cultures and related highly with Hofstede's cultural dimensions. They found that consumers of individualistic countries had high expectations. According to Patterson & Johnson (1993), individualist form expectations of services and once they encounter the service, they evaluate the service performance, oftentimes against their expectations (Cited in Zhang *et al.*, p.10).

In the review by Zhang *et al.* in their study *Cross-cultural Service Research: A Review of the Literature and Future Research Directions*, appeared that Hofstede's cultural dimensions seemed to be the dominant framework for comparisons of customer expectations of services. A major conclusion they found was that culture with more individualism have higher service quality expectations.

2.7. PREVIOUS STUDIES

Many studies in the past were conducted about service quality, student satisfaction and higher education. Some of them are:

Firdaus (2005), in his paper "The development of HEdPERF: a new measuring instrument of service quality for higher education sector", found HEdPERF (Higher Education Performance) to identify the authentic determinants of service quality in higher education institutions. He did his survey among the six higher learning institutions students. The survey was done on one private university, two public universities and three private colleges in Malaysia. He found five factors non-academic, academic, reputation, access, and program issues to be the determinants of service quality in higher education. The SERVPERF and HEdPERF scales were compared in terms of reliability and validity and concluded for the superiority of the new purposed measurement instrument.

Poister (2013), in their paper “On student perspective of quality in higher education” proposed eight dimensions of quality in higher education. The survey was done among the students of Pakistan about their perspective of higher education. The surveyed students who were pursuing higher education (MS, MPhil, Ph.d) in technology advanced countries. The link of online survey was sent to the target population, obtaining about 100 to 200 respondents. The eight dimensions of quality they proposed are Design, Delivery and Assessment, Academic facilities, Non-academic facilities, Recognition, Guidance, Student representation, Study opportunities and Group size. According to the survey they found the Design, Delivery and Assessment, Academic facilities, recognition to be most important dimensions from student perspectives.

Qi Huang (2009) conducted a research on, *the relationship between service quality and student satisfaction in higher education sector: a case study of undergraduate sector of Xiamen University of China*. The survey studied the undergraduate student satisfaction in service quality of Xiamen University, which was the first university in China founded by an overseas Chinese. The service quality sub variables used in the research was the combination of variables developed by Firdaus (2005), Angell, Heffernen and Megicks (2008) and Navarro, Iglesias and Torres (2005). The data was collected through questionnaires. A 7 point Likert Scale was used to record the responses with 1 (strongly disagree) to 7 (strongly agree). The SPSS program was applied in analyzing the data. The study showed that the undergraduate student of Xiamen University of China was satisfied with the quality service provided by the university. The main sub- variable for the student satisfaction was the academic aspects followed by non-academic aspects, cost, and access, teaching methods, industry links, program issues and reputation. The study showed that academic aspect to be most important for the student satisfaction in Xiamen University of China. According to the results of this analysis, it showed positive correlation between the overall service quality and student satisfaction, which is consistent with the findings of Anderson and Sullivan (1993), that satisfaction is a function of perceived service quality. The better the service quality, the higher was satisfaction of the students.

This research was based on the past studies of Firdaus (2005), Poister (2013) and Qi Huang (2009). Qi Huang (2009) conducted the survey using the model developed by

Firdaus (2005), Angell, Heffernen and Megicks (2008) and Navarro, Iglesias and Torres (2005). The study showed the academic aspects, non-academic aspects, access to be most important for student satisfaction in Xiamen University of China. As those three variables were of HEdPERF and was developed by Firdaus (2005), HEdPERF model was adopted to conduct this research. The additional variables were taken from the research conducted by Poister (2013). In their paper they found design, delivery and assessment, academic factors and recognition to be the important factors. But design, delivery and assessment and group size were adopted and the other variables like academic factors were overlapped with academic aspects and recognition with reputation of HEdPERF model. As the research is about the graduate student satisfaction, group size was also thought to be important factor influencing satisfaction

2.8. THEORETICAL FRAMEWORK

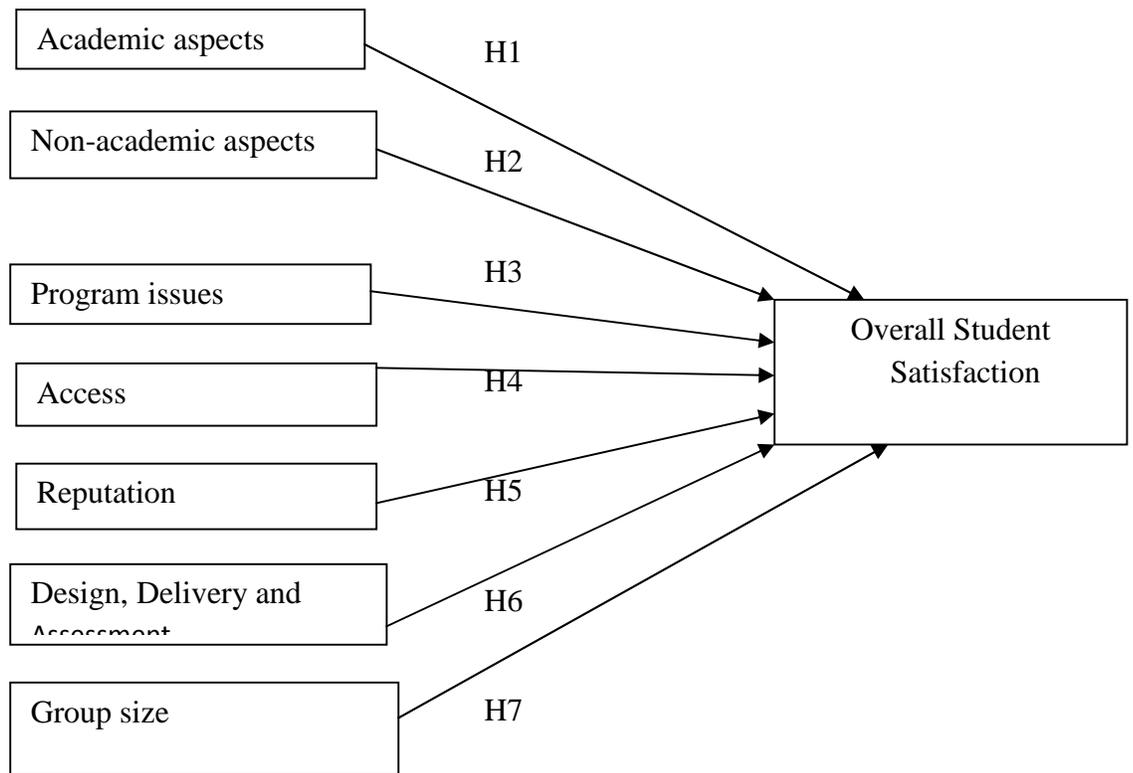
This research was mainly based on Firdaus (2005) *The development of HEdPERF: a new measuring instrument of service quality for higher education sector*. In his study, Firdaus (2005) identified the HEdPERF (higher education performance) model. HEdPERF is the service quality measuring tools in the field of higher education. Consequently, Brochado (2009) in his study concurred that HEdPERF is the most effective instrument of measuring the service quality within the higher learning institutions.

2.8.1. Conceptual Framework

“A conceptual framework indicates how the researcher views the concept involved in a study, especially relationships between concepts” (Veal, Business research methods, 2005, p.51). This study was developed primarily basing on the Firdaus’ HEdPERF (2005). He measured service quality in higher education sector while using the following five dimensions as follows: academic, non-academic, program issues, access and reputation. These aspects are useful tools when measuring the service quality in higher education sector. All these five dimensions was adapted in the conceptual framework. Additionally, after reviewing various related literatures of service quality,

two aspects of: Design, delivery and assessment and Group size, which also determines the service quality was included. The two dimensions was adopted from the study conducted by Poister (2013) on: *On student perspective of quality in higher education*. Therefore, the conceptual framework will include all these seven aspects as independent variables in relations to the utmost student satisfaction as dependent variable.

Figure 2.3: Conceptual Framework



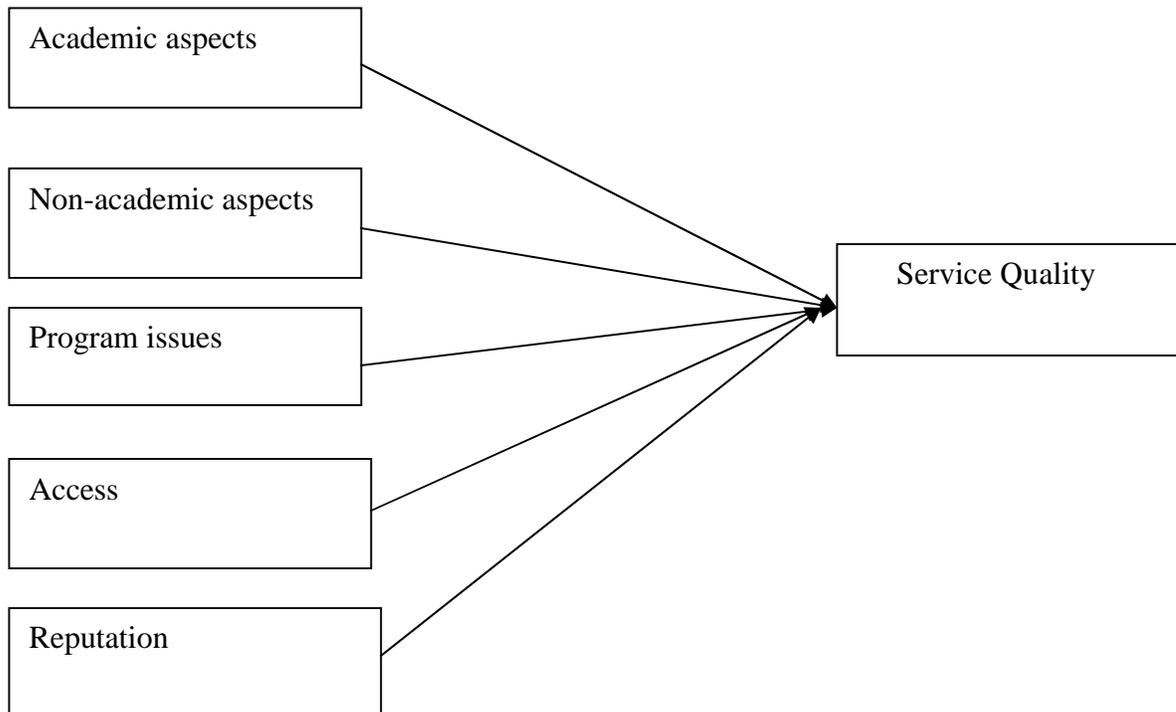
Source: Author (2015)

The variables of HEDPERF in respect to service quality are:

- a) Academic aspects
- b) Non-academic aspects
- c) Program issues
- d) Access

e) Reputation

Figure 2.1: Theoretical framework prospects (a):



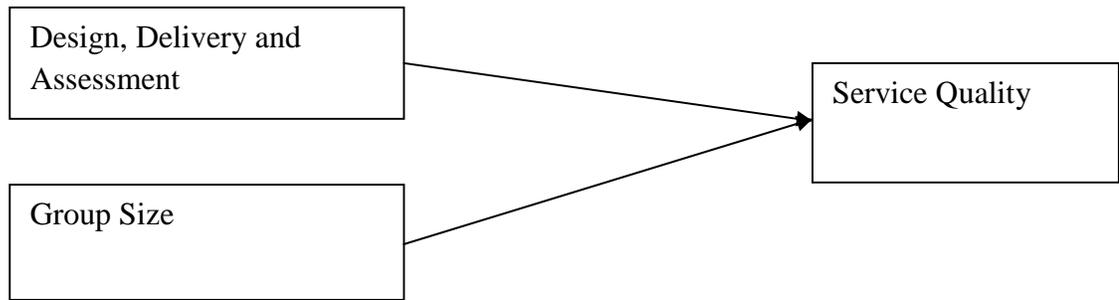
Source: Firdaus, A. (2005)

Poister (2013) in their study, *On student perspective of quality in higher education*, proposed an eight dimensions of service quality model in higher education. These eight dimensions include: Design, Delivery and Assessment, Academic facilities, Non-academic facilities, Recognition, Guidance, Student representation, Study opportunities and Group size. However, it was only two variables that were adopted while the others variables were extend beyond to the variables of HEdPERF:

a) Design, Delivery and Assessment and

b) Group size

Figure 2.2: Theoretical Framework (b)



Source: Poister (2013).

2.9. RESEARCH HYPOTHESES

1. H1: There will be a direct statistically significant relationship between academic factors and overall student satisfaction among Malaysian Universities.
2. H2: There will be a direct statistically significant relationship between non-academic factors and overall student satisfaction among Malaysian Universities.
3. H3: There will be a direct statistically significant relationship between program issues and overall student satisfaction among Malaysian Universities.
4. H4: There will be a direct statistically significant relationship between access factors and overall student satisfaction among Malaysian Universities.
5. H5: There will be a direct statistically significant relationship between program issues and overall student satisfaction among Malaysian Universities.
6. H6: There will be a direct statistically significant relationship between reputation factor and overall student satisfaction among Malaysian Universities.
7. H7: There will be a direct statistically significant relationship between design, delivery and assessment and overall student satisfaction among Malaysian Universities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter presents details about the research methodology. It entails the description of how the study was carried out. It contains research methods to be used, the population targeted, sampling design and procedures. Also, it includes the research instrument, methods of collecting data, scale construction as well as the statistical procedures of treating the data collected. More so, it shows how the validity and reliability tests of the research instruments was managed, controlled besides describing how the data was gathered and analyzed.

3.2 RESEARCH DESIGN

According to Brink and Wood (1998), the main purpose of a research design is to provide a concrete plan in order to answer the research question and it acts as a “blueprint for action,” (p.100). It gives out the strategies that were used by the researcher so as to develop an objective, interpretative and more accurate information.

As the main objective of this study was to explore the relationship between the quality of services provided by universities in Malaysia and the overall student satisfaction, the research was descriptive in nature trying to describe the population characteristics.

This study uses the quantitative method. Quantitative survey is a research method that is “concerned with the collection and analysis of data in numeric form,” (Blaxter, Hughes and Tight, 1996, p.61). It is tries to find a correlation among the relatively large volumes and numerous sets of data either viewed or gathered from the facts in a research. Quantitative studies are viewed as being more formal, systematic (Zikmund, 2000), and

objective process of generating and constructing information to fit the study. They assist to address specific questions which will generate broad information that are directly related to students' satisfaction in regard to the services offered by the universities in Malaysia.

However, in this study, the major focus was on quantitative survey as a method of finding the relationship of the service delivered by the universities and the overall satisfaction of the students in Malaysia higher learning institutions. The quantitative research was designed in order to fit the questionnaire's schedule in this study, and as Veal (2006) affirmed, they are the most common and frequent techniques useful for this kind of research. In this case, a more descriptive survey was useful "to study the characteristics in a population for the purpose of investigating the probable solutions of a research problem," (Brink and Wood, 1998: 289).

A survey is critical in this study due to the following reasons:

-) It would be deemed suitable as the research objectives in this study are not aimed to infer the cause or effect of the research topic but mainly to describe the nature of the relationship between the service quality and student satisfaction in universities in Malaysia.
-) The method is regarded to be free from biasness or intervention from the researcher (Cohen et al 2000).
-) Survey is also identified as being impartial and the study is considered non-prejudiced

However, the method is not short to some limitations. The following limitations are worth noting:

-) The respondents could be bias as they are aware of the study and this may influence their responses. The respondents might provide some of the information to appraise the researcher while responding to the questionnaires.

-) Also, the survey might be costly, tedious and time-consuming as it demands professionalism and much cooperation between the researcher and the respondents.
-) In sometime, the data collected with this method would be so voluminous and involves a lot of coding in the analysis process.
-) Additionally, the researcher may sometimes generalize the study which may interfere with the findings of the research.

Nonetheless, despite the above identified limitations, its strengths on the other hand outweigh its weaknesses and it is seem necessary to adopt the survey design in this study.

3.3. TARGET POPULATION

A population, according to Keller (2009), “is the group of all items of interest to a statistics practitioner,” (p.5). Target population, on the other hand, may be described as being the total group of individuals from whom the investigator may obtain information or data to realize and meet the research objectives (Mc Daniel, 2001). Also, according to Burns and Grove (1997), target population is regarded to be “the entire aggregation of respondents that meet the designated set of criteria,” (p.236). These are group of people who are in a position to respond to the questions and to whom the findings in the survey will apply to. As the research is aiming to evaluate and assess the overall student satisfaction in relations to the service quality of universities in Malaysia; the target population was the graduate students (Both local and international students) who are schooling in universities in Malaysia. There about 120,000 students studying for graduate students courses in Malaysia (Keller, 2009).

So, the target population for this research is the graduate students studying in Malaysian universities. The undergraduate students are not included as there are not many of the international undergraduate students. The target population, therefore, include both

local and international students. According to the Malaysian Bureau of statistics (2014), there are about 120 000 graduate students in the country Universities students population.

3.3.1. Sampling Procedure and Size

A sample is considered to be a valid representative set or subset of the population targeted in the study. According to Keller (2009), a “sample is a set drawn from the population,” (p.5). Sampling is a process which involves the selection of a sub-section of the targeted population so as to represents the total population to be studied. It assists to get the information or data that contain the phenomenon of interest. It is a sub-set of the population that is mainly selected so as to participate in the survey (Zikmund, 2011).

While sampling, there are two criterion of sampling the population, according to Polit and Hungler (1995), and involves: the probability samples and the non-probability samples. The probability sample is the one whereby the probability of selecting the sample of respondent is guaranteed. On the other hand, non-probability sampling is a situation whereby the probability of selection is not assured or known.

For the purpose of this study and for us to achieve our set research objectives, the research applied simple random sampling technique as it is easier to determine the sample size. Also it was effective as “It is not practical to collect data from the entire target population, so the researcher uses a sample instead,” (Field, 2005: 35). As guided by Guadgnoli and Velicer (1983), “A maximum sample size of 100 to 200 is often recommended. The recommendation for a minimum sample size of 100 to 200 observations is probably based on the argument that a correlation coefficient becomes an adequate estimator of the population coefficient when sample sizes reach this level,” (p. 265).

As this research employs the multiple regression and factor analysis, the size of the sample was based on getting the minimum threshold of these techniques. “As general rule, for factor analysis, the minimum is to have five times as many observations as there are variables to be analyzed” (Hair *et al.*, 1998, p.99). “Although a minimum ratio is 5 to 1 for multiple regression, the desired level is between 15 to 20 observations for each independent variable, while 200 is considered optimal” (Hair *et al.*, 1998, p.166). In this study, the sample size is anticipated to range from 100 to 200 university students. Since the research was limited by financial constraints, a feasible sample was considered. Since,

we the total population is about 120 000 graduate students, it was statistically significant to sample 100 to 200 students as the simple random sampling will help measure up what the students feel about their institutions. Furthermore, the randomness of picking the respondents ensured that the answers were not formed from an informed opinion or pre-advanced arrangement but rather what exactly a student felt.

3.4. SAMPLING METHODS

“The chief motive for examining a sample rather than a population is cost. Statistical inference permits us to draw conclusions about a population parameter based on a sample that is quite small in comparison to the size of the population” (Keller, 2009, p.159).

The primary goal of conducting this research is to analyze the relationship between service quality in universities in Malaysia and the overall student satisfaction. As the study is intended to measure the graduate student satisfaction who are studying in Malaysia, it will relate to all universities in Malaysia, but due to the resource constraints and limited time constraints only universities in and near to Kuala Lumpur and Selangor was taken into sample survey. A simple random sampling was chosen for the survey in this research.

Random sampling is a mode of probability sampling that involves drawing of the sample from the part of the population which is at the researcher’s proximity. That means, a sample population that was selected randomly selected where every respondent had an equal chance of being selected for the study. It may be through meeting the person or including a person in the sample when one meets them or choose by finding them through technological means such as internet or through phone (Cooper, 2000).

3.5. RESEARCH INSTRUMENTS

In this study, there were seven variables relating to service quality in the universities. They are non-academic aspects, academic aspects, program issues, access, reputation, design, delivery and assessment and group size. The dependent variable, in

this research is the overall student satisfaction as they are described in the above chapter, Chapter Two. The conceptualization of the five variables of service quality: academic aspects, non-academic aspects, program issues, access and reputation was adapted from Firdaus' HEDPERF (2005) while the other 2 variables: design, delivery and assessment together with the group size were adopted from the research conducted by Poister (2013). The researcher found it best suited to adopt this research instruments as they are simple and easy to carry out a research that is limited in time and finances. Though there are other research instruments that can be used in this kind of research, based on the constraints the researcher had to deal with, it was on the advantage of the study to use these simplified research instruments.

These study instruments were adopted due to their high relationship and effect they have on the overall student satisfaction. There were two sections that categorize the questionnaire. Section A is the main part of the study and it will include all those questions concerning both the dependent variable and independent variables. All indicators are going to be measured using the 5-point Likert-scale, with "1" representing 'strongly disagree' while on the other hand showing those who will 'strongly agree'. The seven-point Likert scale was criticized by Lewis (1993), as it is seen to lack verbal labeling of points especially from point 2-6 and may consequently make the respondents to overuse the far ends of the scale. Nevertheless, Babakus and Mangold (1992) had argued that a 5-point Likert scale would be effective as it reduces the "frustration level" of among the respondents, thus increasing the rate responsiveness coupled with quality. Therefore, the researcher in this study will use the 5-point Likert scale. In connection to this, Cooper (2006) pointed that Likert scale is considered to be the most frequently scale that is used in the variation of the summated rating scale as it is simple to develop and has a high probability of providing a highly reliable scale.

Consequently, Section B will contain questions that will guide the research to gather personal information connected to the respondents.

3.6. DATA COLLECTION PROCEDURE

In this study, both primary and secondary data were collected so as to evaluate the relationship between the service quality and overall student satisfaction in universities in Malaysia.

3.6.1 Primary data

According to Veal (2006), "Primary data are new data specifically collected in a current research project- the researcher is the primary user," (p.99).

In this research, the researcher collected primary data through questionnaire survey with an aim of achieving some of the specific objectives. The data was gathered from the universities that are at within or at the proximity of both Kuala Lumpur and Selangor cities. The researcher distributed questionnaires both in hard copy as well as the soft copy to collect the primary data. In this case, the soft copy questionnaire refers to the online questionnaire. Online questionnaire was created using a website: www.universities.malaysia.com and they hence distributed via the email, Facebook and Twitter accounts especially to the students who undertaking the Master's programs in universities in Malaysia.

The survey was conducted from the 16th of February 2014, to the 15th of March, 2014. The survey was collected from: Universiti Malaya, Universiti Pertahanan Nasional Malaysia, Kolej Universiti Metropolitan Kuala Lumpur and Universiti Terbuka Malaysia (Kuala Lumpur state) while Universiti Teknologi MARA, Universiti Islam Antarabangsa Malaysia, Universiti Selangor and Universiti Taylor (Selangor state). A total of between 300 to 400 students was surveyed in this study.

3.7. RELIABILITY TEST

According to Zikmund W.G. (2003), a researcher is supposed to conduct a reliability test so as to ensure that the questionnaires are valid and reliable by ensuring that the study is error free and will consequently yield at least consistent outcomes. It is worthy to note that, the reliability of the questions used in studying each of the variables is obtained from the Cronbach's coefficient, where alpha is outlined to be 0.6. Additionally, the internal reliability and consistency of the questions was considered higher, especially when the outcomes are near to 1.

Questionnaires to be distributed while conducting this survey will all be written in English. This is because English language is the official language in Malaysia and widely used in universities in Malaysia. Both hard copy and online questionnaires are going to be distributed among several students who are in their master's program in Malaysia

3.8. STATISTICAL TREATMENT OF DATA

All collected data in this study was analyzed and computed while using the SPSS computer program. Both, descriptive and inferential statistics was applied as statistical treatments mechanisms in this study.

3.8.1 Descriptive statistics

According to Keller (2009), “descriptive statistics deals with methods of organizing, summarizing, and presenting data in a convenient and informative way,” (p.2).

In this research, the variables that was analyzed while using an interval scale of measurement, arithmetic means as well as the tables of percentage was applied so as to summarize and analyze the data collected. On the other hand, the variables that was analyzed by the use of nominal scale which includes age, gender, ethnic, University category, tuition fee’s sponsorship, or through the use of an open-end scale and includes items such as the table of percentage or frequency was applied in order to analyze and summarize the data gathered accordingly.

3.8.2. Inferential statistics

As Keller pointed, “inferential statistics is a body of methods used to draw conclusions or inferences about characteristics of populations based on sample data,” (2009, p.3).

Also, “Pearson’s correlation coefficient is a measure of the correlation between 2 variables (X) independent and (Y) dependent variables, which gives a value between +1 and -1” (Keller, 2009).

Pearson’s Correlation Coefficient was used in this study to study the relationship between the (X) independent variables of service quality and (Y) dependent variable, overall student satisfaction of students of Universities in Malaysia. The Pearson’s formula of correlation coefficient to be used is:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

The rule for testing the hypothesis is, if the P-value (significance of correlation) is less than the value of Alpha, the null hypothesis (H_0) was rejected, which means the alternative hypothesis (H_a) was accepted.

3.9. ETHICAL ISSUES

Voluntary participation- All prospective research respondents were adequately informed regarding the potential risks and the procedure involved in the research. In addition, all of the participants were not in any way obliged or threatened to take part in the study since the researcher served them with notifications way in advance so as to promote their informed consent.

Confidentiality- The researcher made sure that the participants were guaranteed of their confidentiality and which were compulsorily and strictly adhered to. The researcher also assured the respondents of maintaining the information as a secret only known to the researchers and themselves. This information was never to be made accessible to anybody who did not directly participate in the study.

In addition, confidential communication including papers or grants that were submitted personnel records, for publication, military or trade secrets was all stored in confidence.

Anonymity- Strict anonymity standards were employed. This meant that all of the participants would remain anonymous throughout the exercise, even to the researcher himself.

Other ethical issues observed included:

Honesty- The researcher embarked on maintaining truthfulness in the manner that he reported the outcomes of the research by ensuring the absence of any misrepresentation of data, falsehood, or fabrication.

Objectivity- The researcher deterred from bias in the experimental design, peer review, data analysis, personnel decisions, data interpretation, as well as expert testimony and others.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 INTRODUCTION

The chapter will delve on the findings and analysis of this study. The results were generated from a set of data gathered from Universities in Malaysia within Kuala Lumpur and Selangor region. The data were collected by open-ended questionnaires both online and offline as a research instrument. The gathered data were analyzed by SPSS statistical software to produce the intended guiding results inform of tables and graphs. Quantitative analysis was employed to bring out the actual ideas and insights of the participants. The research study made use of both demographic and non-demographic variable to classify the study. Demographic variables were represented by gender, age, ethnic group, sponsors, kind of university, period of study, and level of study. Non-demographic variables were in section B and were represented by the dependent variable of service quality while section C had seven factors; academic aspects, non-academic aspects, program issues, mode of communication, reputation, access, and group size. All these non-demographic variables were measured on a five-point Likert scale where a variable was assessed where it was strongly disagreed, disagreed, neutral, agreed and strongly agreed.

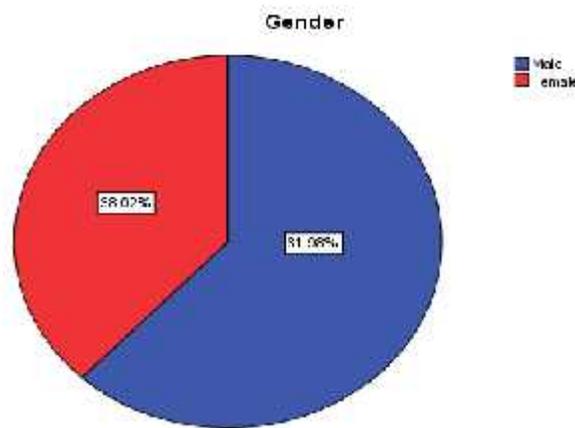
4.2 DEMOGRAPHIC RESULTS ABOUT THE RESPONDENTS

The initial set of survey questions was to screen the respondents' background data to allow only the relevant respondents who were only university students to participate in the survey. Question seven of the survey was the key point of whether the participant would proceed with the survey or not as it asked whether the participant was an undergraduate.

4.2.1 Gender

Gender of the respondents was an important factor to consider as it plays a major role in determining the kind of equality there is in Malaysian universities. Further, as I seek to understand the main factor that students look for in their quest for higher education, I will also look at the gender with many of students' and what derive them to be satisfied with service offered top them by their higher institution of learning. The figure below shows the distribution of gender in our sample study.

Figure 4.1: Gender of the participants



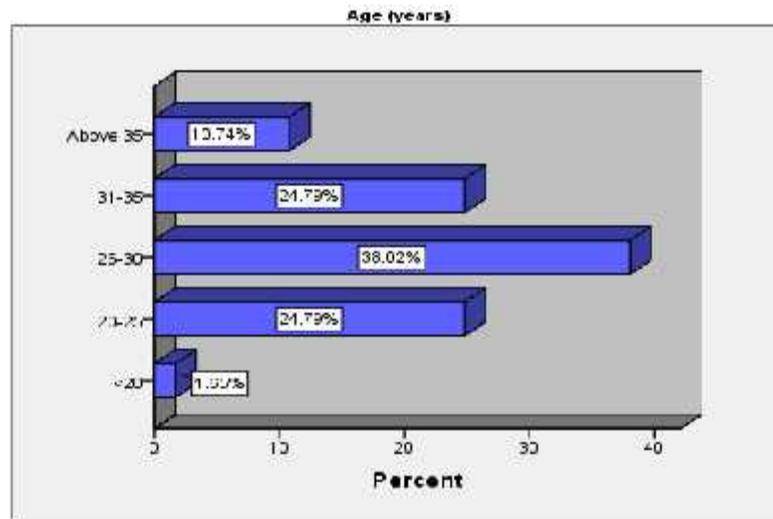
As deduced by figure 4.1 above, many of the respondents at 61.98% were males, while the rest at 38.02% were female. Though through affirmative action and gender rights crusades continue advocating the inequality in the education system, more men are present in the universities in Malaysia as not only does the universities accommodate locals but also foreign students of whom the majority are males from Asia.

4.2.2 Age

Students' age is important in this survey as it helped in determining how young adults who are the majority in these institutions of higher learning assess service quality as a factor in their academic satisfaction. On undergraduate programs most of the students are younger students as many of them comes into the university directly from their high schools unlike in post graduate studies. It is through age that academic boards and

managements of universities can be able to design programs that were lively and satisfying to students who are much younger than their tutors.

Figure 4.2: Age of the respondents



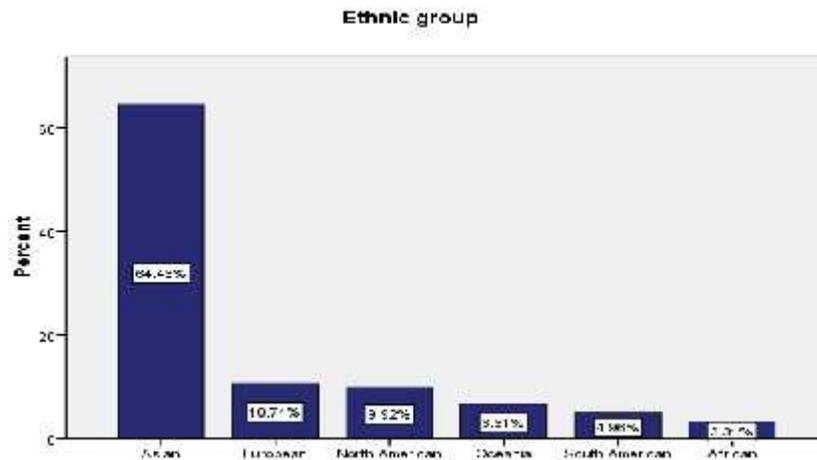
Universities nowadays are filled with both young and middle aged adults as they go back to school to quench their thirst for knowledge and earn promotions as they climb their career ladder. This trend has seen many middle aged population with diplomas going back to classes and enhance their skills while those with degrees are going for masters' degrees. Since this research focused more on the programs with many of international students, it surveyed most of the students pursuing masters degree programs. 38.02% of the students were aged between 26-30 years; these students were pursuing masters' degrees. They were followed closely by those aged at 20-25 years at 24.79% and 31-35 years at 24.79%. Those aged above 35 years were 10.74% these were many of the working students who came back to advance their academic knowledge to raise their chances of being promoted.

4.2.3 Ethnic group

Ethnic groups of a population are a crucial factor in factoring what satisfies people as people from different ethnic groups may have divergent things that satisfies them. Foreigners rate their academic satisfaction through what they have seen and been taught in their countries. For example, a foreign student from developed country was satisfied if

he/she is taught with the same high level applied in their country such being given typed notes through online and so on while an international student from a developing country may enjoy the new changes in his current institution that are not found in his country.

Figure 4.3: Ethnic group of the respondents



As shown in figure 4.3 above, many of the interviewed students at 64.46% were Asian. 10.74% were European, 9.92% North American, 6.61% Oceania, 4.96% South American and 3.31% African respectively. Since Malaysia is in Asia, thus it went as expected that many of the students at the universities here were from the same continent followed by those from Europe. However, all the international students combined form a large portion of the students at around 40%.

4.2.4 Sponsors

When assessing education and its deliverables, sponsors becomes a vital factor to consider as they are part of the pillars of education. Therefore, when we are assessing the service quality and students' satisfaction in the institutions of higher learning, we must give fees payers or sponsors a considerable regards. More so, when we are assessing the quality of education offered in private universities, sponsors matters a lot as they are the ones creating wealth and resources for driving the institution forward.

Figure 4.4: Sponsors or fee payer

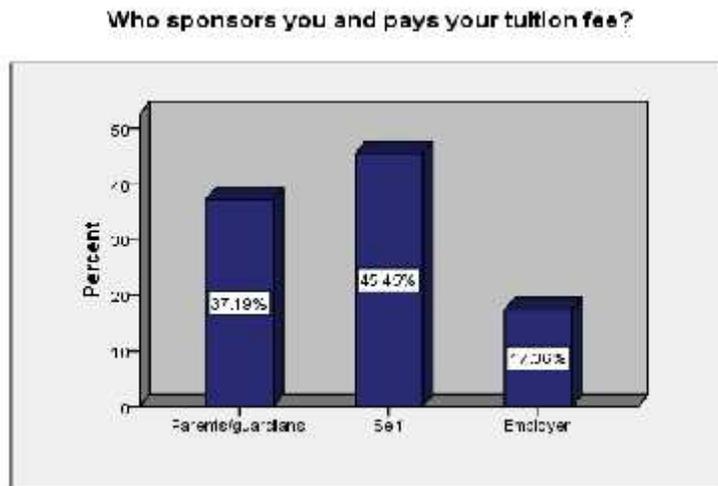
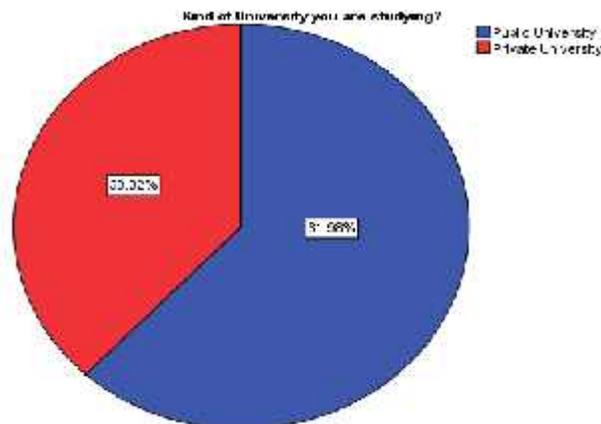


Figure 4.4 above shows who pay the fees for the students and we deduce that 45.45% of the respondents pay for themselves, 37.19% by their parents or guardians and the final group at 17.36% get their learning fees from their employers. Since the survey sampled many of the masters students, it turned out that most of them pay for their own studies. Some of these students are working and attend their classes in the evening or during the holiday while others at 17.36% re sponsored by their employers to enhance their job skills and effectiveness. The portions of students who are sponsored by their parents/guardians are the undergraduate students of whom many are Malaysian and a few Asian.

4.2.5 Kind of University

Figure 4.5: Kind of University

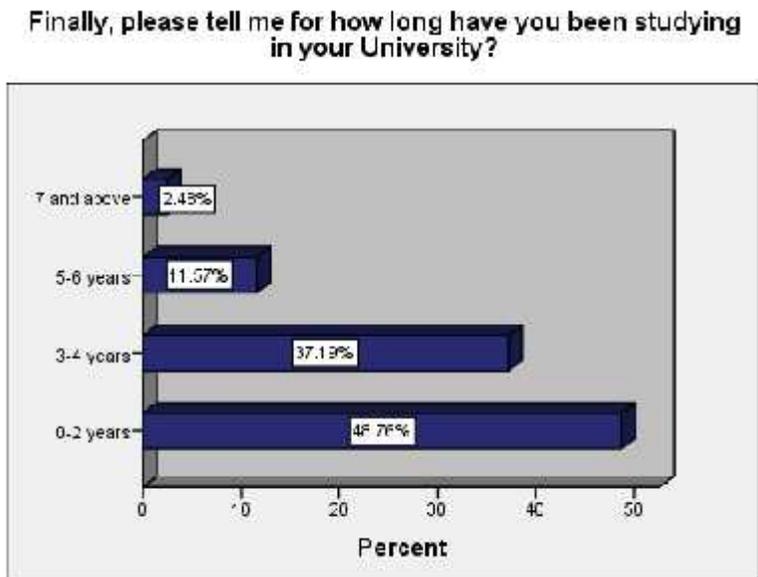


As shown above in figure 4.5, when asked about the kind of University the participants were studying majority of them at 61.98% said they were in public while the rest at 38.02% said they were at private universities. The bigger percentage at public universities could be attributed to the low cost charged by public universities relative to private ones.

4.2.6 Length of study

To determine or assess how good a service or an object is, the period of study or length of association with that service or things will determine how better an assessment of the service was. To be able to successfully analyze a service offered, most of the time it depends with the period of time one has come to contact with that service or products. Thus, time is a master factor in determining the quality and satisfaction within the academic world.

Figure 4.6: Period of study at the University

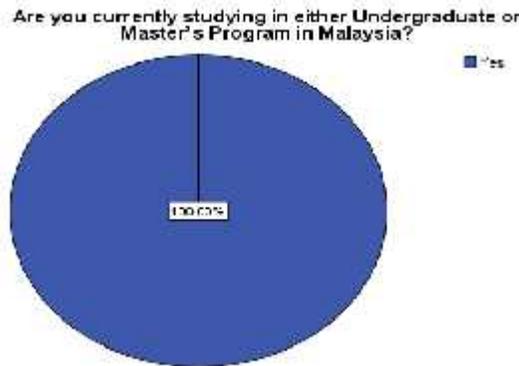


Asked how long a respondent had stayed in the university studying, a significant number of students at 48.76% said 0-2 years, 37.19% said 3-4 years, 11.57% said 5-6 years while only a few for 2.48% said 7 and above as shown in figure 4.6.

4.2.7 Level of study

The level of study variable was used as a screening question to determine the suitability of participants who were of interest to the study. A respondent had to be a student of a graduate course in one of the selected Malaysian universities to qualify.

Figure 4.7: Undergraduate or master's program



The pie chart above labelled figure 4.7 shows that the survey was only carried out on students studying in universities in Malaysian universities as all of the participants at 100% were qualified. Since the survey was about assessment of students' satisfaction and quality service as a determinant in choice of institution for higher education, every respondent was required to be a student pursuing a degree in Malaysia.

4.3 Reliability test

Table 4.1: Summary of respondents

Case Processing Summary

		N	%
Cases	Valid	121	100.0
	Excluded	0	.0
	Total	121	100.0

The table 4.1 above shows the number of respondents assessed for the test of reliability.

Table 4.2: Reliability table**Table 4.2.1: Every variable reliability test**

Construct	Cronbach's Alpha	Number of items
Gender	0.994	1
Age	0.901	1
Ethnic group	0.945	1
sponsors	0.891	1
University	0.997	1
Years of study	0.995	1
Study program	0.945	1
professional image	0.895	1
Problem solving	0.992	1
Teaching methodology	0.985	1
Consultation time	0.924	1
University inquiries	0.995	1
Competent instructors	0.996	1
Confidentiality	0.998	1
Excellent counselling service	0.854	1
Staff are easy to contact	0.996	1
Helps with request	0.978	1
Knowledgeable administrative staff	0.975	1
Timely delivery	0.990	1
Provision of handouts	0.989	1
Accurate and retrievable records	0.998	1
Positive attitude	0.991	1
Caring administrative staff	0.999	1
Up to date curriculum	0.994	1
Provision of documentations adequately	0.996	1
Theory and practice are appropriate	0.984	1
Fair grading	0.997	1
Flexible structure	0.993	1
Reputable programs	0.998	1

As shown in table 4.2, the Cronbach's alpha reliability coefficients of the dependent variables of service quality in section B and that of dependent variables to satisfaction in section C indicates a figure of 0.994 which is better as it is closer to 1.0. All the other Cronbach's alpha reliability coefficients tests of the every dependent variable in both section A and B are shown below. Generally, a reliability test which is over 0.8 is considered good, one in the 0.7 range is considered acceptable and the ones less than 0.6 are said to be poor. Since, the reliability on the table above is greater than 0.9 we consider it to be better.

4.4. SECTION B- HYPOTHESIS TESTING

4.4.1 Relationship between academic aspects and overall student satisfaction

Ho1-there was no relationship between academic factors and overall student satisfaction of the students of universities in Malaysia.

Ha1-there was a relationship between academic factors and overall student satisfaction of the students of universities in Malaysia.

Table 4.3: Hypothesis 1

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	223.989	16	.000
Likelihood Ratio	209.575	16	.000
Linear-by-Linear Association	98.812	1	.000
N of Valid Cases	121		

The first hypothesis assessed whether there exist a relationship between academic factors and overall students' satisfaction in Malaysian universities. As shown in table 4.3 above, we can see that $X(16) = 0.000$, $p = 0.000$ meaning that the calculated p value is less than the $p\text{-value} = 0.05$. Thus, we reject the null hypothesis and accept the alternative

hypothesis. This means that there exists a statistically significant relationship between academic factors and overall student satisfaction.

4.4.2 Relationship between non-academic aspects and overall student satisfaction

Ho2-there was no relationship between non-academic factors and overall student satisfaction of the students of universities in Malaysia.

Ha2-there was a relationship between non-academic factors and overall student satisfaction of the students of universities in Malaysia

Table 4.4: Non-academic factors versus satisfaction

	Non-academic factors					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Overall students' satisfaction. Strongly disagree	2	0	0	0	0	2
Disagree	2	8	0	0	0	10
Neutral	0	2	0	0	0	2
Agree	0	2	18	39	9	68
Strongly agree	0	0	0	0	39	39
Total	4	12	18	39	48	121

As deduced above by table 4.4, majority of the participants agreed that there existed a relationship between non-academic factors and overall students' satisfaction as an agreement of student's satisfaction has largest number at 39 versus agreement of non-academic factors, just as a strong agreement has a stronger relationship as the table shows.

Table 4.5: Hypothesis 2

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	239.635	16	.000
Likelihood Ratio	176.679	16	.000

Linear-by-Linear Association	91.118	1	.000
N of Valid Cases	121		

After performing the Chi-square test, the result was as follows; $X(16) = 0.000$, $p = 0.000$ which means that the calculated value $p = 0.000$ is less than the p -value $= 0.05$ as depicted by table 4.5 above. This result states that we reject the null hypothesis and accept the alternative hypothesis which says that there exists statistically significant relationship between non-academic factors and overall student satisfaction.

4.4.3 Relationship between program issues and overall student satisfaction

Ho3-there was no relationship between program issues and overall student satisfaction of the students of universities in Malaysia.

Ha3-there was a relationship between program issues overall student satisfaction of the students of universities in Malaysia.

Table 4.6: Program issues versus overall student satisfaction

program issues versus overall student satisfaction

		program issues					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Overall student satisfaction	Strongly disagree	2	0	0	0	0	2
	Disagree	7	3	0	0	0	10
	Neutral	0	2	0	0	0	2
	Agree	0	10	13	45	0	68
	Strongly agree	0	0	0	3	36	39
Total		9	15	13	48	36	121

Many of the respondents at 45 out of 121 agreed together with another greater number at 36 strongly agreed that there exist a relationship between program issues and

students satisfaction as shown by table 4.6 above. These number of the respondents who viewed presence of a relationship between these variables was more than 60% of the participants hence the reason to conclude presence of a relationship.

Table 4.7: Hypothesis 3

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	217.498 ^a	16	.000
Likelihood Ratio	191.569	16	.000
Linear-by-Linear Association	89.885	1	.000
N of Valid Cases	121		

As depicted by table 4.7 above, the calculated value of $p=0.000$ of the Pearson Chi-Square is less than p value= 0.05 which means that we accept the alternative hypothesis which confirms that there exist statistically significant relationship between program issues and overall student satisfaction.

4.4.4 Relationship between access and overall student satisfaction

Ho4-there was no relationship between access and overall student satisfaction of the students of universities in Malaysia.

Ha4-there was a relationship between access and overall student satisfaction of the students of universities in Malaysia.

Table 4.8: Hypothesis 4

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	224.208	16	.000
Likelihood Ratio	200.080	16	.000
Linear-by-Linear Association	85.339	1	.000
N of Valid Cases	121		

The results in table 4.8 above indicate that the calculated value of $X(16) = 0.000$, $p = 0.000$ is less than the p value $= 0.000$. Hence, it means that we reject the null hypothesis and accept the alternative hypothesis which proves the existence of a relationship between access and overall student satisfaction of the students in Malaysian universities.

4.4.5 Relationship between reputation and overall student satisfaction

Ho5-there was no relationship between reputation and overall student satisfaction of the students of universities in Malaysia.

Ha5-there was a relationship between reputation and overall student satisfaction of the students of universities in Malaysia.

Table 4.9: Hypothesis 5

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	215.233	16	.000
Likelihood Ratio	188.943	16	.000
Linear-by-Linear Association	89.811	1	.000
N of Valid Cases	121		

The result of the Pearson Chi-square above in table 4.9 shows that $X(16) = 0.000$, $p = 0.000$ which means that the calculated value of $p = 0.000$ is less than the p value $= 0.05$ as shown by table 4.9 above. This means that we reject the null hypothesis and confirm the alternative hypothesis that confirms that there exist a statistically significant relationship between reputation and overall student satisfaction.

4.4.6 Relationship between design, delivery and assessment and overall student satisfaction

Ho6-there was no relationship between design, delivery and assessment and overall student satisfaction of the students of universities in Malaysia.

Ha6-there was a relationship between design, delivery and assessment and overall student satisfaction of the students of universities in Malaysia.

Table 4.10: Hypothesis 6

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	206.064	16	.000
Likelihood Ratio	177.873	16	.000
Linear-by-Linear Association	91.271	1	.000
N of Valid Cases	121		

The table 4.10 above shows that there exist a relationship between design, delivery and assessment and overall student satisfaction of the Malaysian students as the $X(16) = 0.000$, $p = 0.000$ which means that the calculated $p = 0.000$ is less than p value $= 0.05$. This result thus states that we accept the alternative hypothesis and reject the null hypothesis. Therefore, we conclude that there exist a relationship between design, delivery and assessment and overall student satisfaction of the students of universities in Malaysia.

4.4.7 Relationship between group size and overall student satisfaction

Ho7-there was no relationship between group size and overall student satisfaction of the students of universities in Malaysia.

Ha7-there was a relationship between group size and overall student satisfaction of the students of universities in Malaysia.

Table 4.11: Hypothesis 7

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	221.394	16	.000
Likelihood Ratio	188.663	16	.000
Linear-by-Linear Association	83.173	1	.000
N of Valid Cases	121		

As deduced by the table 4.11 above, the $X(16) = 0.000$, $p = 0.000$ means that the calculated p is less than the p value $= 0.000$, therefore we reject the null hypothesis and accept the alternative hypothesis and conclude that there exist a relationship between group size and overall student satisfaction of the students of universities in Malaysia.

4.5 Regression

Table 4.12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.951	.903	.903	.423

Predictors: (constant), academic aspects, non-academic aspects, program issues, mode of communication, reputation, access and group size.

In this table 4.12 above, I used adjusted R^2 as it shows us how these seven variables of service delivery are related. The value of adjusted R^2 is 0.903 which indicate the presence of a strong relationship between these variables. In addition, this result inform us that these seven factors; academic aspects, non-academic aspects, program issues, mode of communication, reputation, access and group size are integrated in the universities in Malaysia successfully at a rate of 90.3%. Moreover, the adjusted R square deduces the presence of a strong positive correlation between the variables at 0.903 as it is near positive one.

Table 4.13: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	199.640	1	199.640	1113.527	.000 ^a
Residual	21.335	119	.179		
Total	220.975	120			

- a. Predictors: (Constant), academic aspects, non-academic aspects, program issues, mode of communication, reputation, access, and group size.
- b. Dependent Variable: When the staff promise to do something by a certain time, they do so

I used ANOVA to institute the significance of the regression model from where the test statistic of F value is 1113.527, which is larger than the Beta value of 0.05, meaning that the regression model has less than $p < 0.001$ probability of yielding false prediction. Hence, table 4.13 shows that gender, age, sponsors, ethnic group, academic aspects, non-academic aspects, program issues, mode of communication, reputation, access and group size were found to be significantly related to service delivery and students' satisfaction at the Malaysian universities. The reason why I used multicollinearity is because it has no effect on the final regression model as well as on related statistics like R^2 , p values and F ratio. Further, the research used chi-square test as it wanted to test whether the research data were consistent with a hypothesized distribution. In addition, the chi-square was crucial in this analysis as the research used simple random sampling method coupled with a categorical data.

4.6 Summary of Findings

Model	R	R-Square	Adjusted R	Std Error of the
1	0.321	0.103	0.081	2.20880
2	0.523	0.274	0.237	2.01288

- a. Predictors: (constant), age
- b. Predictors (Constant), age, educ.

The Chi-square test is great test used in statistical analysis to test whether there observed values or what the researcher that was tight is the same as the expected value from the analysis. It was good to use chi-square test in this project data as the variables exceed three and the research needed to know exactly what impacts higher education standards in the world. Further, it was great to test the homoscedasticity and multicollinearity of the data set to understand whether the variables of study were

strongly related. As expected, the results of the study showed that the independent variables and dependent variable was linear. Though in some variables it was affected by outliers, it was linear.

Test of Homogeneity of Variances

Statistic	df1	df2	Sig.
4.128	2	51	.021

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	545.593	2	272.795	13.620	0.000
Within groups	1020.722	51	20.012		
Total	1566.315	53			

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS & RECOMMENDATIONS

5.1 INTRODUCTION

The aim of this research study was to assess whether service quality was part of the search for higher education by students. Service quality is understood to bring satisfaction to students more so those pursuing higher education thus the reason we surveyed Malaysian university students to assess their quality of education. Hence, this chapter will delve on the summary of the results, conclusion, significance recommendations and suggestions to improve the service quality and pinpoint quality gaps in the academic sector.

5.2 SUMMARY

5.2.1 General Information

Many of the respondents were male as they constituted 61.98%, while the remaining proportion of 38.02% was females. This gender disparity can be attributed by the effect of the patriarchs' societies in the South Eastern Asia, a region where males are given preference relative to women folk. Further, due to the impact of family planning policies introduced by the successive governments in Asia, many parents are opting to sire a boy child rather than a girl child, thus, the parents with children of both sexes prefer to educate their boy child more than their female children. The impacts continue that way till when the children start searching higher education and men tend to be more educated than women. Further, women pursue higher education in an age where they are very sexually active, thus, many tend to first focus on marriage compared to education.

Most of the respondents were aged above 20 years where 38.02% were aged 26-30 years, followed closely by those aged 20-25years and 31-35 years both at 24.79%. Since this survey aimed at determining quality service was a determinant in the quest for higher education, the survey had an eye on the many students pursuing post graduate degrees and a few undergraduate degrees hence the reason we had a big percentage of the

participants aged above 26 years. Further, some of the students were pursuing doctorate degrees, hence, their advanced age as majority of master's and doctorate students were mature people who had worked for a length of time before coming back to enhance their education. Improvement in technology has changed the work environment in a great way as many of the white collar and blue-collar jobs require workers to be techno savvy to yield set targets and desired quality. Thus, many workers are finding themselves back to academic corridors in pursuit of much desired skill to safeguard their businesses and positions in their working areas. Additionally, due to improved academic standards and emerged many learning institutions, the older generation and those less educated are being forced to go back to class to solidify their stay in the competitive business environment for the digital generation is threatening their career line.

Ethnic group was a variable that was investigated to note the group with the largest proportion of students in Malaysia. Student's ethnic group matter lot especially in a place where there are all kinds of people from all walks of life, as a lecturer who understands all the divergent backgrounds of his/her students is able to apply his teaching in a diversified manner that all learners grasp in an easy way. Since Malaysia is situated at Asian continent, it thus came out as expected that most of the students in the universities of this country were of Asian origin at 64.46%. They were followed by those of European origin at 10.74%, North American at 9.92%, Oceania at 6.61%, South American at 4.96%, and African at 3.31%. This population distribution can be linked with proximity to Malaysia and economic power of a continent. Since, Malaysia is in Asia, many of the students in this country came from Malaysia and surrounding countries within Asia; they were followed by those from Europe as it is the second nearest and economically power continent neighbouring Asia (Afzal, Akram A, Akram M. & Ijaz, 2010). However, Northern American residents were many in Malaysian universities compared to Oceania even though Oceania were closer to Malaysia compared to North America, this was attributed to the economic means and geo-political power of Northern American. Moreover, the introduction of exchange programs, and rise in quality of education in Malaysia had encouraged many international students in the country. As expected, African was the lowest proportion of students due to the distance and economic power in their place even.

To have a quality service delivery, resources must be used effectively and efficiently, thus students were required to part with fees to cater some of their expenses and tuition fees in their stay during their universities academic calendar. The Malaysian government has created sponsorship for the bright and needy students and partial scholarships for international students who may find it hard to pay the full amount of fees required. It is for this reason I included sponsor as part of a crucial variable to investigate as know whether it was a significant factor in delivering quality service in the academic arena. Since this survey focused more on the post graduate students to have a clear picture of what was the main determinant in search for higher education institutions, the results indicated that 45.45% of the respondents were sponsoring themselves. Many of the master's degree students both foreign and local ones comes for the higher degree after working for a particular period and thus majority of them are working class. Again, these post graduate students work part timely to cater for their academic and some their families as these are mature people of whom many have families thus they have a greater role of financing their studies and families, thus as they studies they also look for jobs to sustain them. Another bunch of students at 37.19% were being sponsored by their parents/guardians. These parents sponsored students were mostly the ones in undergraduate programs and a few studying masters programs. A middle class family tends to educate their children up to undergraduate level especially if the family has more than three children as the cost of educating every member to a master's degree becomes expensive. Another group at 17.36% was sponsored by their employers to go and gain more skills. Only a few of the students sponsored by their employers were pursuing undergraduate courses while majority of them were pursuing master's and doctorate degrees. It is usually a policy in successful companies to educate their employees through sponsoring them to gain more skills that in return enhance a company's productivity. Many of the working class in developing and developed countries are diploma and degree holders thus, employers encourages them to go back to class to acquire new skills to keep in touch with the already capricious technological world (Carman, 1990). Many of these respondents were in public universities at 61.98% as shown in the chapter four results. Since public universities charge less compared with private universities, it goes without saying that majority of the students more so those who sponsored themselves went to

public universities that offered quality services. Private universities even though had minimal number of students at 38.02% they had a fair share of the academicians. A significant number of participants stated that private universities albeit their high fees relative to public institutions, they offered service quality and efficient environment as lecturers there were more committed to their duties (Carman, 1990).

The period of time a student has been studying was recorded as it was a crucial factor in identifying how well a student was familiar with the institution he/she was being surveyed upon. It was found out that many of the respondents had been in their learning institution for a period of 0-2 years. This short stay at the universities is attributed to level of education these respondents were in. Most of the respondents were in pursuing post graduate degrees hence the few years they were in school as their courses requires 2 to 3 years to complete. This batch of students was followed by those who had stayed there for 3-4 years. Many of these group members were the undergraduate students whose course required a minimum of 3 to 4 years to complete. Only a small margin at 2.48% of participants had stayed in their institutions for more than 7 years. Some of these students were those pursuing doctorate degrees and deferred them either because of incomplete thesis research or because of financial constraints, other's stayed in the institutions for a long time to repeat some units they had failed.

Asked whether, they were studying in either undergraduate or for a master's program, all the respondents unanimously said, 'Yes' meaning that the survey was carried to students of higher learning. The result was in line with the research objective which sought to know whether service quality was a determinant in the search for higher education.

5.2.2 Reliability

The data used in chapter four was reliable as it is proven by the reliability test where the value of Cronbach was found to be 0.994 for the independent variables and 0.981 for the dependent variables. This value meant that the data used were reliable as they were closer to 1.0. Using an authentic and reliable data is a very important factor in generating trustworthy results and conclusion as fake data could lead to misinterpretation

of the results and finally mismanagement of resources. This outcome shows that the research questionnaires were well designed and captured all the essential attributes.

5.2.3 Relationship between academic aspects and overall student satisfaction

As shown by results for hypothesis one in chapter four, it was evident that there existed a weak or almost no relationship between academic aspects and overall student satisfaction. Student's satisfaction is noted to boost student's morale in their search and quest for higher education, thus the kind of academic aspect an institution showed to students determined its future growth and population. For example, the participants said that the assessment and the grading by instructor were fair hence leading the interest to pursue higher education. More than 60% of the respondents stated that the grading system by the instructors was fair. Academic aspect was also measured in terms of institutions offering flexible structured programs where many of the respondents stated that they felt satisfied learning in institutions of higher learning that had flexible programs that enabled them to work part timely. Finally, other students felt satisfied in their higher learning institutions as the academic programs ran by the universities were reputable.

5.2.4 Relationship between non-academic aspects and overall student satisfaction

Chapter four results about the relationship between non-academic aspects and overall student satisfaction depict existence of a strong positive relationship between these two variables. This is because respondents stated that they felt satisfied with non-academic staff as they communicated and interacted well with the students. Moreover, the sampled institutions had a highly skilled non-academic staff who worked effectively and efficiently to the satisfaction of the students. Additionally, more than 65% of the participants claimed that visitors and students were treated equally by the non-academic staff. The overall results therefore proved that there existed a strong correlation between student's satisfaction and non-academic aspects an act that lead to more students seeking that institution of higher learning.

5.2.5 Relationship between program issues and overall student satisfaction

After analyzing the result assessing whether there existed a relationship between program issues and overall student's satisfaction, it was found that was a strong

relationship between the two variables. This was further confirmed and by the majority of participants who stated that there were satisfied with their universities as they offered a wide range of programs with various specializations. Other respondents who were more than 65% they were satisfied by their institutions as their tutors provided them with feedback about their progress thus enabling them to improve and work more on their weaker areas. Another measure of service quality was the kind of programs the institution offered. Many of the participants again said that their universities ran excellent quality programs that also made them to like and further their education there.

5.2.6 Relationship between access and overall student satisfaction

The chapter four results show that there exist a positive relationship between access of the universities programs and overall students' admission. The respondents indicated that they chose their institutions of higher learning by considering whether it was easy to access and contact both non-academic staffs and academic ones. It was also said that making university rules and academic programs available in both offline and online made a significant number of students to admire the institution and join it. Other respondents appreciated their institutions as they noted that their lecturers and fellow students were approachable and social.

5.2.7 Relationship between reputation and overall student satisfaction

When the respondents were asked whether the image portrayed by the university they were in was appropriate, many of them strongly agreed and stated that, it was the main reason why at first they chose study there. Hence this inform us that image is very important to an institution as future and current students stay was determined by how they perceive about the university of their choice. Reputation of an institution was further reinforced by participants saying that instructors at their place of study were highly educated and competent in their respective field thus it became easier for a student to grasp and apply what he/she was taught. Another measure of strong relationship between reputation and satisfaction was the feeling portrayed by learners that the instructors at their universities allocated sufficient time for consultation thus brings students and lecturers closer to a point of improving education standards. Respondents felt satisfied

when they were assisted by their lecturers and supervisors whenever they faced problem in their academic work.

5.2.8 Relationship between design, delivery and assessment and overall student satisfaction

Result in chapter four for this question show presence of relationship between design, delivery and assessment and overall student satisfaction. The design, delivery and assessment variables were measured in term of communication where respondents stated that their instructors communicate well in classroom an action that led to their satisfaction. Majority of participants said that they were satisfied with the university mode of communication as it was effective and punctual. Other students attributed their like the mode of communication at their institution of higher learning because the staffs there used simple and polite language.

5.2.9 Relationship between group size and overall student satisfaction

Students almost all over the world feel satisfied with the kind of learning carried in their institution when education offered is students centred as a lecturer is able to attend to the challenges of every student. Thus, it is for this reason that most of the participants in this survey felt satisfied by service quality delivered by their institution as majority stated that their classes were manageable as they had a small number of students. There were other students who claimed that they felt satisfied because their tutors attended classes regularly and were able to monitor every student action. Further, many stated that they would prefer to be in an institution where class timing was appropriate.

5.3 CONCLUSIONS

Service quality is a major determinant in search for higher education. Majority of the respondents claimed that they join their institution of higher learning based on the quality of learning and other related services being offered there. Having staff who are easy to contact is another factor that help pull students to an institution as students like a place where they can interact freely with their lecturers and non-academic staffs. This open society where association is smooth help students grow well rounded as they can be

guided in any area they feel they have a challenge. Fulfilling promise by both academic and non-academic staff is another area that determines how students will gauge their institution and have faith in them (Berry, 1995). This is because, if staff promise to do something and they don't do it, they demoralizes their students and suspicion is created hence limiting the level of interaction and satisfaction. Institutions that have serious tutors and lecturers provide their students with handout in time and keep accurate and retrievable records improved students morale and satisfaction as the results shows. Further, staff that was fond of showing caring attention and positive attitude toward students and also provided up to date curriculums tended to yield better results as their students gets satisfied. These satisfied students invite their friends and relative to join those lectures classes and courses thus marketing the institution on behalf due to level of service they receive.

A relationship between academic aspects as service quality and student satisfaction was found to exist. Academic aspects are vital factors in promotion of an institution to students just as non-academic aspects are. Other relationships found between overall students satisfaction were non-academic aspects, program issues, mode of communication, reputation, and access and group size. All these factors promoted service quality and were main variables that students for higher learning used to gauge their institution of choice. How well an institution provided all these services well determined its population and future student's enrolment.

5.4 RECOMMENDATIONS

Universities seeking to boost their student's population must boost both their staff moral together with that of students by providing qualified tutors and lectures who understand their role properly. Institutions that offered flexible structures, fair grading structure and reputable courses found themselves with large of students that could have handled. Therefore, in future any institution that seeks to attract more students must improve its structures both academic and physical to accommodate diverse mode of students.

Outside the classroom, students usually considers and gauge how they are treated by the non-academic staff who they will meet often in libraries, kitchens and other areas as they walk around the campus (Berry, 1995). If these students get mistreated they will not only hate the place they are mistreat or offered poor service but will also communicate the ill matter to their friend and relative who will in turn hate the place. Thus to avoid backlash and downfall of a higher education, even non-academic staff must be taught to handle the students and every visitors in the institution with utmost respect and equally. Further, universities should strive to employ highly skilled employees to deliver fast and efficient quality service.

The programs offered in an institution will impact on the number of students who will join it, for example, a student's aspiring to have an engineering course cannot enrol in an institution that has no such a course. Thus, it is prudent for institution of higher learning to broaden their number of courses they offer to increase enrolment. However, this course must be of high quality with highly skilled staff to satisfy those students' academic needs. In addition, how easy to access an institution both offline and online determined and build a first impression seeking universities to study in. If for instance, a potential student goes online to search for a higher institution but on browsing on that institution websites he/she finds that he cannot or the necessary details he needs he will from that moment start downgrading that institution. Therefore, it is paramount for universities to keep updating their online and offline information to help potential customers to locate them.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

This study was limited by the fact that it dealt with one main variable which is service quality as a determinant for higher education while we know that there many variables that influences the choice for a high education institution. Factors such as affordability, fees charged, courses offered and accommodation are other major factors that determines a student's satisfaction and choice in enrolling in an institution of higher learning. As a result of few variables, the researcher proposes that future researches to incorporate more variables associated with search for higher education institution and link

them with student's satisfaction and service quality to shed more light on these document results.

Moreover, service quality is yield by many factors within academic arena, and no single study can claim to have exhausted it as technological advancement continue to pour more and simple ways for students to be satisfied with their learning. Additionally, the research was carried in only the selected universities and region in one country in one continent whereas results from different countries and continent could yield different results dues to divergent culture. It thus goes without saying that conducting a world wide range survey could help a lot in reinforcing this survey results as well as creating concrete base to conclude as whether service quality was a determinant in the quest for higher education.

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APPENDIX I

QUESTIONNAIRE

This research was used for the partial fulfillment of Master Degree of Business Administration, AL-MADINAH INTERNATIONAL UNIVERSITY (MEDIU) University, Malaysia. This survey was completely treated anonymous and confidential and your responses were used critically for the purpose of this research. Please answer all the questions as completely and candidly as possible.

Thank you for your time.

Screening Question:

Section A

This Section provides personal information that I have seen necessary so as to validate the questionnaire and heighten the accuracy level of the results. All responses in this research was kept confidential and your cooperation in giving me this information was highly appreciated.

- 1) Please, which is your gender?
 - Male
 - Female
- 2) Please tell me of your age range,
 - <20
 - Between 20-25
 - Between 26-30
 - Between 31-35
 - Above 35

3) Please indicate which Ethnic group did you hail from:

- European
- Asian
- African
- North American
- South American
- Oceania

4) Who sponsors you and pays your tuition fee?

- Parents/ guardians
- Self
- Employer

5) Please categorize the form/kind of University you are studying?

- Public University
- Private University
- Others

6) Finally, please tell me for how long have you been studying in your University?

.....

7). Are you currently studying in either Undergraduate or Master's Program in Malaysia?

- Yes
- No

(If, No. Thank you. Have a nice day)

Section B

This Section relates to certain and specific aspects of the services that a student experience after joining University. Please mark to the appropriate response as you indicate your own personal feeling by ticking the response as directed by the following scale:

NB: 1=strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree

		1	2	3	4	5
1.	Your University has a good professional image					
2.	While in the University, every problem is solved by the					
3.	The teaching methodology used in your University is					
4.	Your Instructor usually allocate sufficient time for					
5.	All the University inquiries are dealt with efficiently					
6.	Instructors are highly educated and competent in their					
7.	The University staff priotize confidentiality when					
8.	The university operates an excellent counseling service					
9.	The staff are easy to contact					
10.	Instructors are never too busy to respond to my request					
11.	Administrative staff have good and competent					
12.	When the staff promise to do something by a certain					
13.	The handouts are provided adequately by the Instructor.					
14.	Administration offices keep accurate and retrievable					
15.	The tutors are showing positive attitude towards students					
16.	Administrative staff provide caring attention					
17.	Curriculums designed by the university are up to date					
18.	The documentations are provided adequately by the					

19.	The proportion between theory and practice are					
20.	The assessment and the grading by the instructor are fair.					
21.	The university offers programs with flexible structure					
22.	The academic program run by the university is reputable					
23.	Administrative staff communicates well with students					
24.	The university's graduates are easily employable					
25.	Students are treated equally by the staff					
26.	The university offers a wide range of programs with					
27.	The University tutors provide feedback about my					
28.	The university runs excellent quality programs					
29.	Instructor communicate well in classroom					
30.	Overall, I am satisfied with the university					

Thank You! May you have a nice day.

APPENDIX II

Which is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	75	62.0	62.0	62.0
	Female	46	38.0	38.0	100.0
	Total	121	100.0	100.0	

Please tell me of your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<20	2	1.7	1.7	1.7
	Between 20-25	30	24.8	24.8	26.4
	Between 26-30	46	38.0	38.0	64.5
	Between 31-35	30	24.8	24.8	89.3
	Above 35	13	10.7	10.7	100.0
	Total	121	100.0	100.0	

Please indicate which Ethnic group did you hail from?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	European	13	10.7	10.7	10.7
	Asian	78	64.5	64.5	75.2
	African	4	3.3	3.3	78.5
	North American	12	9.9	9.9	88.4
	South American	6	5.0	5.0	93.4
	Oceania	8	6.6	6.6	100.0
	Total	121	100.0	100.0	

Who sponsors you and pays your tuition fee?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Parents/guardians	45	37.2	37.2	37.2
Self	55	45.5	45.5	82.6
Employer	21	17.4	17.4	100.0
Total	121	100.0	100.0	

Please categorize the form/kind of University you are studying?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Public University	75	62.0	62.0	62.0
Private University	46	38.0	38.0	100.0
Total	121	100.0	100.0	

Finally, please tell me for how long have you been studying in your University?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0-2 years	59	48.8	48.8	48.8
3-4 years	45	37.2	37.2	86.0
5-6 years	14	11.6	11.6	97.5
7 and above	3	2.5	2.5	100.0
Total	121	100.0	100.0	