

STUDENTS' SATISFACTION ON SERVICES QUALITY: COMPARISON BETWEEN PUBLIC AND PRIVATE UNIVERSITIES IN KLANG VALLEY

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ABSTRACT

Education is able to enhance an individual's quality of life particular in the higher education. With proper knowledge from higher education, graduate students are able to build up self-leadership, obtain better health-care, more prestigious employment and greater job satisfaction. The aim of this study is to compare the service quality between public and private university in Malaysia based on their students' satisfaction. This is because the evaluation of service quality in universities will provide significant findings or inputs for management level in decision-making process in order to improve their services quality. Hence, the research was conducted at two selected case studies which are public and private university respectively using modified SERVQUAL approach. The target respondents of this study are undergraduate students from both universities. About 420 copies of questionnaires were distributed and collected in four selected faculties at both universities. From the results, Public University showed lowest negative gap score compared to Private University. Besides, correlation analysis also proved that there were significant relationships between service quality and student satisfaction which indicated that service quality of both university lead the student's satisfaction. The analysis also found that there were significant relationships between interrelated factors amongst dependent variable which are five SERVQUAL dimensions. In addition, the assessments of service quality in both universities were able to provide comprehensive understanding of the students' needs and significant inputs for improving their higher education quality. Furthermore, the findings were also able to provide comprehensive information for management level in decision-making process particularly if they are intending to implement new programmes inside their universities.

Keywords: *Higher Education, Private University, Public University, Service Quality, Students' Satisfaction*

INTRODUCTION

Service Quality has become one of higher learning institutions strategic option in attracting students (Landrum, Prybutok, & Zhang, 2007). Perceptions of service quality is essential

for higher learning institutions that are able to influence the post enrolment word of mouth communications behaviour of students (Russell, 2005). In order to become a successful higher learning institution, service quality becomes one of their strategic option in attracting students (Landrum, Prybutok, & Zhang, 2007). For instance, highly satisfied students are able to help the institution to spread a positive word of mouth. Indirectly, higher learning institutions are able to attract new applicants and retain tuition-based returns. Generally, there are two categories of higher education institutions in Malaysia; public university and private university. Both types of universities provide courses from certificate level up to diploma, bachelor, master and doctorate level in Malaysia.

Noor and Pitt (2009) defined facilities management as delivery of customer satisfaction and the best value for supporting and enhancing core business of an organisation. Despite that the facilities management practice in Malaysia is still considered by many as not reaching maturity among higher education institutions, there are quality management system ratings such as MS ISO 9001: 2000 Certification for Quality Management System (QMS ISO 9001:2000) and Quality Assurance (QA), which are adopted by most of the universities for improved education quality and to meet customer expectations and satisfactions (Kanji, Malek, & Tambi, 1999). This is because positive perceptions from students on service quality are able to create sustainability of higher learning when students' expectations exceeds. Hence, the aim of this research is to compare service quality of public and private universities in Malaysia (Anderson, Fornell, & Lehmann, 1994).

Hence, the aim of this study is to analyse the students' satisfaction on service quality in public and private university and subsequently determine the relationship between service quality and students' satisfaction in order to become a successful higher learning institution and for improving their higher education quality.

SERVICE QUALITY

The definition of services is the fulfillment of life's basic needs such as transport, communication and utilities. Indirectly, services help to improve the quality of human life. Thus, Philip (1994) defined service as any act or performance 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.

A. SERVICE QUALITY

In order to achieve educational excellence parameters, service quality is a strategic option in the education field. Alves and Raposo (2010) found out that highly satisfied students have positive perceptions of service quality, where the universities are then able draw more students through positive words-of-mouth communications. Hence, academic performance and administrative efficiency of higher education institution are two important factors that motivate and inspire students in achieving high satisfaction on service quality provided by

their institution. Furthermore, service quality is an essential performance measurement and strategic variable in order to achieve educational excellence and cultivate strong perception in student's mind respectively. For instance, providing excellent customer services for higher education institution always becomes one of the important strategies in order to build good relationship with clients or students. This is because they always determine the higher educational industry's future (Usman, 2010). In addition, the function of higher learning institution is similar to the service industry where students are their high potential customers and are able draw more students through their positive words of mouth. Mohamad Tahar (2008) pointed out that the assessment of service quality at higher education institution is based on students' perceptions and expectations on the services provided by higher education institution during teaching and learning process. Hence, human interaction elements are important in performance measurement such as human behaviour and attitudes.

B. STUDENT SATISFACTION

Usman (2010) defined satisfaction as the interrelation between meeting expectations with actions that distinguishes the performance. Hence, students are essential in the education field whether it be for public or private sector in order to determine their performance of system (Sapri et al., 2009). Palacio, Meneses, and Pérez (2002) highlighted every freshmen that got enrolled in university has high expectations on the institution. Previous research shown that students' satisfactions are based on own perception and experience during the college year (Ilias, Hasan, & Rahman, 2009).

C. RELATIONSHIP BETWEEN SERVICE QUALITY AND STUDENT SATISFACTION

Generally, the student satisfaction ranges from dissatisfied, satisfied to highly satisfied when they perceive higher education services such as quality of teachers and facilities, methods of teaching and administration of university (Navarro, Iglesias, & Torres, 2005). Students are likely to be satisfied when the services on their universities able to fulfill their expectations. If the services on their universities are less than their expectations, it will easily dissatisfy these students. However, there are various factors that can influence satisfaction levels when perceived the intentional performances especially cultural values (Tian and Wang, 2010).

Many researchers agreed that there is a significant relationship between service quality and students' satisfaction by comparing their definition (Arun Parasuraman, Zeithaml, & Berry, 1994). From the previous definition of service quality, it can be seen as a form of holistic and continual evaluation. Apart from that, satisfaction can be specifically measured especially through customers' perceptions and expectations. It is agreed that measurement of service quality have now become global acceptance, and satisfaction is led by service quality (Oliver, 1993). Hence, students' satisfaction is important in evaluating the service provided by universities because they have to experience the process of service delivery. It can be

concluded that students' satisfaction is a dependent variable for measuring service quality in a university.

D. EVALUATION OF SERVICE QUALITY IN HIGHER EDUCATION

There are various evaluation methods to measure service quality but most of it depend on the definition of quality; either it is from customers' perspective or management perspective (Lewis, 1993). Ghobadian, Speller, and Jones (1994) pointed out that education is a service industry that is determined and translated from customers' requirement into service delivery process in order to meet the customer's satisfaction. SERVQUAL model is established to measure the service quality of a service organisation such as a university (Parasuraman, Zeithaml, & Berry, 2002).

SERVQUAL MODEL

SERVQUAL model is established based on the differences between customers' expectation and perception of services quality as shown;

$$SQ = P - E$$

The gap theory is positive when the service provided have fulfilled the expectations and therefore the students are likely to be satisfied. After that, Parasuraman et al (1985) utilised the gap theory and developed a service quality model with five types of gap which occur in any service organisation for evaluating the service quality more thoroughly. All five gaps are found in customer and provider during service delivery process as shown in Figure 2.1. However, the purpose of study only focuses on Gap 5 of SERVQUAL model in Figure 2.1 in which to determine students' expectations and perceptions on service quality provided by the university.

TYPE	REMARKS	DESCRIPTION
Gap 1	Difference between customer expectation and management perception	The establishment such gap because of service provider must understand customer needs and expectation during service delivery process.
Gap 2	Difference between management perception and service quality perception	The gap is essential for service provider determine the limited natural resource and market constraint. Total management commitments from service provider also contribute in the gap.
Gap 3	Difference between service quality specifications and service delivery	Performance of employer and series of standard amongst service provider will produce such gap.
Gap 4	Difference between service delivery and external communication	External communication forms variation of promise will raise the initial customers' expectation and may end up the perception of customer is very low due to promises are not fulfilled.

Gap 5	Difference between customer perception and customer expectation	The difference between expected and perceived quality as experienced by customer during service delivery process.
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Figure 2.1: Gap Theory
 Source : Parasuraman et al. (1985)

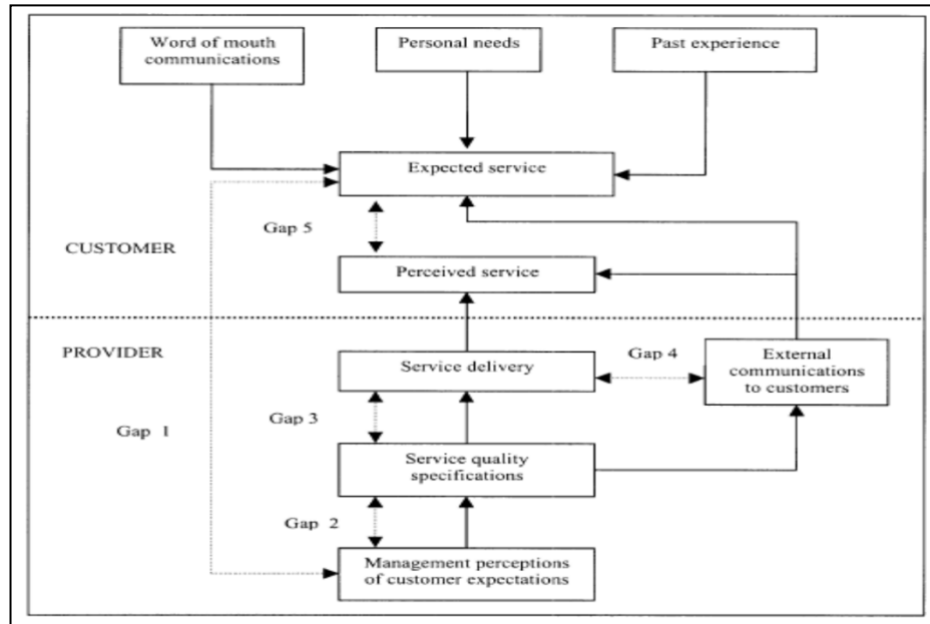


Figure 2.4 SERVQUAL model
 Source: Parasuraman et al. (1985)

DIMENSIONS OF SERVICE QUALITY

Parasuraman et al. (1985) proposed 10 criteria to be used by customers for measuring service quality after developing the SERVQUAL model. 10 criteria of service dimensions from SERVQUAL model are access, competence, communication, courtesy, readability, reliability, responsive, security, tangibles, understanding need of customer. Subsequently, he found that there are high degrees of correlation between them and have summarized it into 5 broad dimensions as shown in Figure 2.3.

SERVICE QUALITY DIMENSIONS	DESCRIPTION
Tangible	Tangibles often refer as appearance of physical facilities, personnel and physical evidence of the services such as campus building, communication materials and equipment (Zeithaml, Bitner, & Gremler, 2006).
Reliability	Reliability often refers as ability of service provider provides services accurately and dependably. A Parasuraman, Zeithaml, & Berry (1988). Zeithaml et al. (2006) revealed that customers' promise and expectation of customer are fulfilled if favour with service.

Responsive	Responsive refer as service provider willing to help customer by offer service in time especially dealing the customer's request, complaints and problem immediately. Zeithaml et al. (2006) stressed that the evaluation is based on perceptive from customers instead of organisation prospective.
Assurance	Assurance is referring as service provider able provides knowledge in well manner in order to gain trust and confidence from customers. Zeithaml et al. (2006) stressed that strong connections will be formed between customer and service provider as customer's mind gain confidence and trust from service provider when assurance is achieved during service delivery process.
Empathy	Empathy is refered to as service provider that is able deliver positive impressions in customer's mind that shows caring and personal attention for customers (Zeithaml et al., 2006). In the same time, service provider has to understand their needs in order to provide the best service for them.

Figure 2.3 Five Broad Service Quality Dimensions
Source: Parasuraman et al. (1985)

Hence, SERVQUAL model is introduced for measuring service quality in higher education institution based on students' satisfaction according to the five dimensions of SERVQUAL. However, there are also four influenced factors probably affecting the evaluation method of service quality such as gender, cultural, courses and seniority.

MATERIALS AND METHODS

In order to obtain accurate results for the study, the methodology of research involved explaining the research design, literature review, case studies, questionnaire design, procedure of data collection and data analysis design. Since the aim of this research is to compare the level of service quality between public and private university, the findings of the research may not only improve the education quality, but also provides comprehensive understanding of the students' needs. Furthermore, the findings could provide essential information to the university's management and help in their decision-making process particularly when it comes to implementing new programs inside the universities.

A. RESEARCH FRAMEWORK

From the literature review, Oliver (1993) showed that service quality leads to students' satisfaction based on their definition. Hence, a comprehensive research framework is developed which have adopted and modified the SERVQUAL model as shown in Figure 2.4.

SELECTED UNIVERSITIES	SELECTED FACULTIES	SERVQUAL DIMENSIONS	OUTPUT
Public University		Tangible	

(CS1)	Faculty of Business and Accountancy Faculty of Dentistry Faculty of Engineering Faculty of Medicine	Reliability	Students' Satisfaction
Private University		Responsive	
(CS2)		Assurance	
		Empathy	

Figure 2.4 Research framework

Source: Oliver (1993)

The dependent variables of the research are students' satisfaction on service quality. While, the independent variables that impact students' satisfaction are adopted from SERVQUAL framework, namely: tangible, reliability, responsiveness, assurance and empathy. From the literature review, student's satisfaction is led by service quality in university.

B. RESEARCH STRATEGY AND APPROACH

Research strategy and research approach are essential in this study. However, the research approach shows how the way of research is carried out and thus has been divided into qualitative and quantitative approach.

Qualitative Approach

Primary data and secondary data are two basic sources in a qualitative approach. The process of collecting primary data involves using questionnaires survey that were distributed to respondents in selected public and private university through postal email and face-to-face approach, as well as case studies.

- Questionnaire Design

Gap analysis of SERVQUAL model was adopted to design the questionnaires. Questionnaires were designed for students using the Likert Scale ranging from 1 (strongly dissatisfied) to 5 (strongly satisfied) to evaluate 22 items of SERVQUAL based on their perception and expectation respectively. The total sample size of the research is 688 students which represents all undergraduate students in both universities for this research.

- Case Studies(CS)

Besides that, CS1 and CS2 are selected as public and private university that are located in Klang Valley which are the chosen case studies in this research (the names of the universities are not mentioned here). This is because both universities have the biggest competitive advantage in terms of location, establishment period and academic reputation at international level. Both universities provide services and facilities for the students at almost the same and equal level but with major differences in tuition fee.

Hence, it can be agreed that both of them provide significant education values in the community.

The secondary data were collected through review of extensive literature from published books, journal article, theses and relevant sources. All relevant data will be ensured its reliability, validity and originality before being included in the list of reference at the end of this paper. The purpose of adopting a qualitative approach for this researchwork is to create a comprehensive questionnaire survey to evaluate the service quality in higher education institutions.

Quantitative Approach

Statistical Package for Social Science Program (SPSS) and Microsoft Excel were used to analyse and interpret the data from the returned questionnaire survey forms. Descriptive analysis was used in this study to analyse and describe the service quality of the selected public university and private university in Malaysia respectively. Correlation analysis was then used to measure the linear relationship between the two scale variables through Pearson correlation.

The SERVQUAL score were calculated from the differences between students' perception and expectation as shown below.

$$\text{SERVQUAL score} = \text{Perception score (P)} - \text{Expectation score (E)}$$

Hence, SERVQUAL score can be obtained through item-by-item analysis and construct-by-construct analysis and computation of an overall single measure of service quality. And, the last two parts of questionnaires for descriptive analysis used to explain the relative importance of SERVQUAL dimensions and degree of satisfaction in Public and Private University.

RESULTS AND DISCUSSIONS

As a conclusion, the research findings were successfully achieved as well as the research objectives. Hence, the conclusion is summarised according to each objective of the research as shown in the followings:

Objective 1: To compare the level of students' satisfaction on service quality between public and private university in Malaysia.

Overall, respondents from both public and private universities indicated the degree of satisfaction on service qualities ranging from neutral to satisfied level with a score of 3.28 and 3.25 respectively. From Table 2.1, there were 0.93% of CS1 respondents and 2.45% of CS2 respondents that were strongly dissatisfied the services provided by their respective

universities. Also, there were 11.11% of respondents from CS1 and 11.76% have rated dissatisfied on service quality by their respective university.

LIKERT SCALE	CASE STUDIES	
	PUBLIC UNIVERSITY	PRIVATE UNIVERSITY
Strongly Dissatisfied	2	5
Dissatisfied	24	24
Neutral	84	96
Satisfied	102	73
Strongly Satisfied	4	6
Total	216	204
Mean Of Satisfaction	3.28	3.25

Table 2.1: Degree of Student's Satisfaction

The objective of this study was achieved by identifying the evaluation method for analysing the services quality in both case studies. The findings showed that the respondents were not satisfied with the services provided by their university. Respondents from the private university showed the highest negative SERVQUAL score compared to the public university. Apart from that, the research proved that the service quality provided lead to the students' satisfaction. However, there are still spaces for further improvement for both selected universities to deliver satisfaction to their students. Besides, future recommendation is made based on the gap of SERVQUAL model which is able to provide a holistic understanding on the service quality in both of the universities.

Table 2.2 Summary of SERVQUAL'S Score

DIMENSION	PUBLIC UNIVERSITY CS 1	PRIVATE UNIVERSITY CS2
Tangible	-0.47	-0.70
Reliability	-0.58	-0.92
Responsiveness	-0.58	-0.94
Assurance	-0.49	-0.78
Empathy	-0.71	-1.03
SERVQUAL score	-0.56	-0.87

Table 2.2 shows the results of SERVQUAL dimensions between CS1 and CS2. CS1 and CS2 scored -0.56 and -0.87 in SERVQUAL gap score respectively. The negative value in the gap score indicates that the services provided by both universities did not reach the students' expectations. Based on the weightage allocated to the five dimensions, it was found that the empathy dimension should be given top priority for both CS1 and CS2 students. The highest gap of empathy items was "Understand needs of the students" with -0.76 and -1.07 for CS1 and CS2 respectively and also highest gap score amongst 22 modified SERVQUAL items.

Objective 2: To determine the relationship between the service quality and the students' satisfaction, a correlation analysis was also conducted using the Statistical Packages for Social Science (SPSS) to determine the relationship between service quality and students' satisfaction. In the context of services quality, five dimensions of SERVQUAL were adopted, which were tangible, reliability, responsiveness, assurance and empathy. Based on the findings, it was noted that service quality that lead to the student's satisfaction ratings. Furthermore, there were significant relationships amongst the dependent variables and was suitable for used to determine the inter-related variable using factor analysis.

The Pearson correlation measures the linear relationship between two scale variable by determine the correlation coefficient is statistically significant. Hence, it is suitable to determine the relationship between service quality (SERVQUAL dimension) and student satisfaction with this measure. The result of Pearson Correlation test showed that there was a very strong relationship ($r(22) = 0.802-0.901$, $p < 0.05$, two tailed) between service quality and students' satisfaction rate. This indicates that there was an empirical evidence to suggest a relationship between service quality and student satisfaction. The two variables are related. Hence, there is significant relationship ($p = 0.00 < 0.05$) between service quality and students' satisfaction.

Table 2.3 Pearson Correlation Coefficient

		Means of Tangible	Means of Reliability	Means of Responsiveness	Means of Assurance	Means of Empathy	Student Satisfaction
Means of Tangible	Pearson Correlation	1	.677**	.630**	.627**	.644**	.802**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	420	420	420	420	420	420
Means of Reliability	Pearson Correlation	.677**	1	.798**	.760**	.743**	.910**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	420	420	420	420	420	420

Means of Responsiveness	Pearson Correlation	.630**	.798**	1	.765**	.734**	.899**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	420	420	420	420	420	420
Means of Assurance	Pearson Correlation	.627**	.760**	.765**	1	.762**	.891**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	420	420	420	420	420	420
Means of Empathy	Pearson Correlation	.644**	.743**	.734**	.762**	1	.888**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	420	420	420	420	420	420
Students Satisfaction	Pearson Correlation	.802**	.910**	.899**	.891**	.888**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	420	420	420	420	420	420

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

CONCLUSIONS

The literature shows that service quality is leading the students' satisfaction ratings because there is significant relationship between them. SERVQUAL model can be introduced to measure the service quality in higher education institutions based on students' satisfaction according to the five dimensions of SERVQUAL. The objectives of this study were achieved by identifying the evaluation method to analyse the services quality in both public and private universities. The findings showed that the respondents were not satisfied with the services provided by their university. Based on the findings, the assessment of service quality is able to provide significant findings or inputs for the university's management level in decision making process for improving their higher education quality such as implementing new programs inside their universities. This is because the input of assessment provides comprehensive results of the students' needs in both universities.

ACKNOWLEDGEMENT

The authors gratefully acknowledged Mr. Kwok Yong Gee for his contributions.

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NOMENCLATURE

- SQ Service Quality, $SQ = P = E$
P Perception of Service Quality and
E Expectation of Service Quality