SERVICE QUALITY AND STUDENTS’ SATISFACTION AT HIGHER LEARNING INSTITUTIONS: A CASE STUDY OF MALAYSIAN UNIVERSITY COMPETITIVENESS

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ABSTRACT

Student satisfaction assessment is vital in determining service quality at higher learning institutions. To remain competitive with other private higher education providers, it is important that the institution continuously acquire, maintain, build stronger relationships and assess the level of students’ satisfaction. This study measures the level of student satisfaction with current services offered by Malaysian university colleges. The exploration and comparison of possible differences in terms of level of satisfaction across gender and various programs/disciplines formulate key objectives. General survey guided by a well structured questionnaire has been administered across a valuable sample of 245 students. A well established university college in Selangor has been selected as sample case and data was collected from twelve different disciplines and/or programs. Ten major constructs i.e. teaching, administrative/management support, transportation, library, computer labs & general labs, accommodation, medical; sports, prayer/religious facilities, and class room facilities were used. Mean analysis reflect student satisfied with many core services & facilities like teaching, administrative support, library, labs, accommodation, medical, and sports, while dissatisfaction has been reported only in three augmented areas like transportation, class room and prayer facilities. Quite interestingly, no significant differences of opinion have been recorded among male or female respondents. Overall, satisfaction level is high and results indicate satisfaction of university college students on educational services offered by the private higher education institution.

Keywords: Service quality, private higher education institutions, satisfaction level, performance, and assessment.
1.0 INTRODUCTION

The importance of customers has been highlighted by many researchers and academicians. Zairi (2000) said “Customers are the purpose of what we do and rather than them depending on us, we very much depend on them. The customer is not the source of a problem, we shouldn’t perhaps make a wish that customers ‘should go away’ because our future and our security will be put in jeopardy”. That is the main reason why organizations today are focusing on customer satisfaction, loyalty and retention. The perception of quality is multilateral: quality means different things to different people (Gerson, 1993) and from the perspective of quality’s dimensions (input, process and output) and from the perspective of the stakeholders, there are many views of quality (Reichheld 1996). The coexistence of many understandings of quality in education sector is a justification for a plenty of quality management models. However, some of these models are appropriate for the educational organizations only in part. Responding to the challenges to facilitate the individuals’ participation in economic and social life, the educational organizations need to focus on the perspective of the learners and on the final result of learning process – the successful learning. More and more organizations emphasize on service quality due to its strategic role in enhancing competitiveness especially in the context of attracting new customers and enhancing relationship with existing customers (Hokanson, 1995). The main purpose of this research is to examine the relationship between service quality and students’ satisfaction at private higher educational institutions in Malaysia.

2.0 LITERATURE REVIEW

2.1 Service Quality and Higher Education

Service quality became a focus of management research through the 1980s and early 1990s. The field is dominated by the SERVQUAL and SERVPERF conceptualizations. These two approaches are based on dimensionality, expectations, experiences, outcomes and stakeholder gaps. Satisfaction and loyalty are concepts that are closely connected with service quality and often included in the same research project as variables that are dependent on service quality. The dimensions of service quality were proposed as the core of SERVQUAL (Parasuraman A, Zeithmal V and Berry L 1985) and then developed into a measurement instrument (Parasuraman A, Zeithmal V and Berry L 1988), the gaps between the players in service delivery and consumption was proposed as an integral element in the application of the SERVQUAL construct (Parasuraman A, Zeithmal V and Berry L 1988). SERVPERF extended SERVQUAL with the addition of an evaluation of service performance embodied in satisfaction (Cronin and Taylor 1992).

The validity and relative worth of SERVQUAL and SERVPERF have been the focus of review and debate (Buttle 1996), concluding that whether customers evaluate service quality in terms of
expectations and perceptions is questionable. Other authors have since looked at comparing the two models, for example, Jain and Gupta (2004), Gilmore and McMullen (2009) and Carrillat et al (2007). The key issues in the conceptualization of service quality remain dimensionality, disconfirmation and contextual adaptation. In Higher Education, the dimensions have been applied with mixed results (Cuthbert, 1996). There is an indication that a student switches focus from tangibles to teaching quality between pre-decision and experience (Douglas et al, 2006) and it has even been suggested that the decision making process, relatively long length of service encounter and intensity of co-creation, mean that these models are fundamentally inappropriate for Higher Education (O’Neill, 2003).

2.2 Student Satisfaction

Student satisfaction is of compelling interest to colleges and universities as they seek to continually improve the learning environment for students, meet the expectations of their constituent groups and legislative bodies, and demonstrate their institutional effectiveness. Unlike service industries, which hold satisfaction as a goal in and of itself, colleges and universities typically perceive satisfaction as a means to an end. Higher education tends to care about student satisfaction because of its potential impact on student motivation, retention, recruitment efforts, and fundraising.

Rowley (2003) identified four main reasons for collecting student feedback:

1. to provide auditable evidence that students have had the opportunity to pass comment on their courses and that such information is used to bring about improvements;
2. to encourage student reflection on their learning;
3. to allow institutions to benchmark and to provide indicators that will contribute to the reputation of the university in the marketplace; and
4. to provide students with an opportunity to express their level of satisfaction with their academic experience.

As Deming (1982) commented, most people form their opinions based on the people that they see, and they are either dissatisfied or delighted, or some other point on the continuum in between. In order to deliver high quality services to students, universities must manage every aspect of the student’s interaction with all of their service offerings and in particular those involving its people. Services are delivered to people by people, and the moments of truth can make or break a university’s image (Banwet and Datta, 2003). In order to deliver total student satisfaction, all employees of a university should adhere to the principles of quality customer service, whether they be front-line contact staff involved in teaching or administration, or non-contact staff in management or administrative roles (Gold, 2001; Low, 2000, cited in Banwet and Datta, 2003).
Devinder and Datta (2003) argue that institutions which want to deliver quality programs and services to students must be concerned with every aspect of the students’ experience on campus. In other words, education quality is not only limited to the lectures and notes received in class or advice and guidance given by lecturers during the consultation hours, but it also includes students’ experience while interacting with the various non-academic personnel and components in the university, the physical infrastructure provided by the university etc. This is consistent with the findings of Jones and Suh (2000), which concluded that transaction specific satisfaction influences overall satisfaction, and that both overall satisfaction and transaction specific satisfaction significantly influence repurchase intention. In fact, students are known to choose universities and programs to enroll based on factors like delivery method, time availability, on/off campus requirements and place to access learning materials (Cohen, Dove & Bachelder, 2001). Students are also found to place great importance for degree acceptance and the university’s reputation in the selection of university (Chun, 2005).

2.3 Service Quality and Customer Satisfaction

Since customer satisfaction has been considered to be based on the customer’s experience on a particular service encounter, (Cronin & Taylor, 1992) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations. Another author stated in his theory that “definitions of consumer satisfaction relate to a specific transaction (the difference between predicted service and perceived service) in contrast with ‘attitudes’, which are more enduring and less situational-oriented,” (Lewis, 1993, p. 4-12) This is in line with the idea of Zeithaml et al (2006, p. 106-107). Regarding the relationship between customer satisfaction and service quality, Oliver (1993) first suggested that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-specific.

Some researchers have found empirical supports for the view of the point mentioned above (Anderson & Sullivan, 1993; Fornell et al 1996; Spreng & Macky 1996); where customer satisfaction came as a result of service quality. In relating customer satisfaction and service quality, researchers have been more precise about the meaning and measurements of satisfaction and service quality. Satisfaction and service quality have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service. (Wilson et al., 2008). Although it is stated that other factors such as price and product quality can affect customer satisfaction, perceived service quality is a component of customer satisfaction (Zeithaml et al. 2006, p. 106-107). This theory complies with the idea of Wilson et al. (2008) and has been confirmed by the definition of customer satisfaction presented by other researchers. The below figure shows the relationship between customer satisfaction and service quality.
The author presented a situation that service quality is a focused evaluation that reflects the customer’s perception of reliability, assurance, responsiveness, empathy and tangibility while satisfaction is more inclusive and it is influenced by perceptions of service quality, product quality and price, also situational factors and personal factors. (Wilson, 2008, p. 78).

In context of Malaysia, majority of the studies have focused on the ways to improve the quality of higher education, unfortunately, no significant study has probed the issue of student satisfaction. For example, Hanif et al. (2008) examine the use of balance scorecard to enhance accountability and performance in higher education institutions concluding that long-term vision through consistent performance evaluation is the key to enhance performance in higher education. Literature review explored showed substantive role of customer satisfaction and service quality, student satisfaction, service quality and higher education. Therefore this study aims to measure student satisfaction against variables of interest.
3.0 RESEARCH METHODOLOGY

3.1 Framework and Hypotheses

For the measurement of student satisfaction on service quality, a model named SERVQUAL was developed by Parasuraman (1988). The model consists of ten components. SERVQUAL provides a technology for measuring and managing service quality. In their 1988 work these ten dimensions were reduced to five dimensions as follows:

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Items in Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Reliability</td>
<td>4</td>
</tr>
<tr>
<td>2 Assurance</td>
<td>5</td>
</tr>
<tr>
<td>3 Tangibles</td>
<td>4</td>
</tr>
<tr>
<td>4 Empathy</td>
<td>5</td>
</tr>
<tr>
<td>5 Responsiveness</td>
<td>4</td>
</tr>
</tbody>
</table>

Figure 3.1: Proposed Theoretical Model
3.2 HYPOTHESIS OF THE STUDY

The hypotheses of the study are developed as below:

- **H1**: There is a significant relationship between assurance and student satisfaction.
- **H2**: There is a significant relationship between empathy and student satisfaction.
- **H3**: There is a significant relationship between tangibles and student satisfaction.
- **H4**: There is a significant relationship between reliability and student satisfaction.
- **H5**: There is a significant relationship between responsiveness and student satisfaction.

4.0 RESEARCH INSTRUMENTS AND DATA COLLECTION

The instrument used in this study is based on Parasuraman et al., (1990). The structured questionnaires were based on the five dimensions of service quality (tangibility, assurance, reliability, responsiveness, and empathy) and used the five point Likert scale from 1 strongly disagree to 5 strongly agree. Random sampling approach was used to identify the respondents for the study.

4.1 Reliability Test

According to George & Mallery (2003), reliability is the degree to which measures are free from error and therefore yield consistent results. The reliability of a measure indicates the stability and consistency with which the instrument measures the concept and helps to assess the ‘goodness’ of a measure (Cavana, Delahaye and Sekaran, 2001). According to Sekaran (2003), the closer the reliability coefficient gets to 1.0, the better it is, and those values over .80 are considered as good. Those values in the .70 is considered as acceptable and those reliability value less than .60 is considered to be poor (Sekaran, 2003). All the constructs were tested for the consistency reliability of the items within the constructs by using Cronbach’s alpha reliability analysis. Cronbach’s Alpha values in respect of each variable are given in table 4.1 below. Respondents were also assured about the confidentiality as information shared in this regard would be used for academic and research purposes only. In conclusion, the results showed that the scores of the Cronbach’s alpha for all the constructs exceeded the threshold of 0.70 indicating that the measurement scales of the constructs were stable and consistent.
Table 4.1: Cronbach’s Alpha Reliability Test

<table>
<thead>
<tr>
<th>Construct</th>
<th>Alpha Coefficient</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction</td>
<td>0.874</td>
<td>10</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.732</td>
<td>8</td>
</tr>
<tr>
<td>Tangibles</td>
<td>0.848</td>
<td>9</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.756</td>
<td>8</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.732</td>
<td>8</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.829</td>
<td>10</td>
</tr>
</tbody>
</table>

4.2 Descriptive Statistics

4.2.1 Pearson Correlation Coefficient

Pearson's correlation coefficient (r) is a measure of the strength of the association between the two variables. According to Sekaran (2003), in research studies that includes several variables, beyond knowing the means and standard deviations of the dependent and independent variables, the researcher would often like to know how one variable is related to another. While correlation could range between -1.0 and +1.0, the researcher need to know if any correlation found between two variables is significant or not (i.e.; if it has occurred solely by chance or if there is a high probability of its actual existence). As for the information, a significance of p=0.05 is the generally accepted conventional level in social sciences research. This indicates that 95 times out of 100, the researcher can be sure that there is a true or significant correlation between the two variables, and there is only a 5% chance that the relationship does not truly exist. The correlation matrix between dependent variable and independent variables are exhibited in Table 4.2 below.

The findings from this analysis are then compared against the hypotheses developed for this study. Table 4.2 shows the mean value depicting the overall students’ satisfaction. As far as this description analysis is concerned, students’ satisfaction is above satisfactory level (with a mean value of 3.39 on a 5 point Likert scale). As far as the mean values are concerned students are satisfied on tangibles, reliability, responsiveness, empathy and assurance. Students are likely to be satisfied in their educational institution when the service provided fits their expectations, or they will be very satisfied when the service is beyond their expectations, or completely satisfied when they receive more than they expect.
Table 4.2: Summary of Means and Standard Deviations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Local Students</th>
<th>International Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Student Satisfaction</td>
<td>4.26</td>
<td>1.03</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.47</td>
<td>0.732</td>
</tr>
<tr>
<td>Tangibles</td>
<td>3.37</td>
<td>0.724</td>
</tr>
<tr>
<td>Reliability</td>
<td>3.41</td>
<td>0.882</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>3.42</td>
<td>0.734</td>
</tr>
<tr>
<td>Assurance</td>
<td>3.31</td>
<td>0.727</td>
</tr>
</tbody>
</table>

This research used Pearson Correlation and Regression Analyses. The findings for empathy show that the mean for Malaysian students are 3.47 and the mean for international students are equal to 3.28. This means that the Malaysian students agree with the empathy of service provided and they were more satisfied compared to international students. The mean for tangibility show that the Malaysian students are 3.37 and international students are 3.31 respectively. This means that the Malaysian students are more satisfied with the tangible service provided. The mean for reliability for Malaysian are around 3.41 whereas the mean for international students are 3.49, this means that the international students are more satisfied compared to Malaysian students with reliability of services provided. The Malaysian students’ responsiveness is 3.42 while the international students mean is 3.45. International students’ are more satisfied than Malaysian students with the responsiveness of service provided. The mean for assurance for Malaysian students are 3.31 while the mean for international students are 3.75. International students are more satisfied than Malaysian students with the assurance of service provided.

4.4.2 Multiple Regression Analysis

In this study, the multiple regression analysis is used as a statistical technique to analyze the linear relationship between a dependent variable and multiple independent variables (Hair et al., 2006). This is a way to recognize whether there is significant relationship between independent variables and dependent variables or not. The model sufficiently explained the variance or coefficient of determination or the R Squared in the effect of control variables relations. According to Hair et al., (2006), the test will be significant if the p-value is less than 0.05. The
beta coefficient is used to determine which independent variables have the most influence on the dependent variable.

**Hypothesis 1:**

H<sub>0</sub>: There is no significant relationship between assurance and student satisfaction.

H<sub>1</sub>: There is a significant relationship between assurance and student satisfaction.

<table>
<thead>
<tr>
<th>Table 4.3: The Relationship between Assurance and Student Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Malaysian Students</strong></td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>International Students</strong></td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

The relationship between assurance and students satisfaction was investigated using Pearson correlation coefficients for the two groups of respondents (Malaysian and international students). The results in Table 4.3 indicates, a moderate and positive relationship between assurance and student satisfaction exists among Malaysian students (R square = .260, n=245, p< 0.05). This means 26% of their satisfaction is determined by assurance. Meanwhile the relationship between international students satisfaction towards assurance shows strong and positive relationship (R square = .463, n=245, p< 0.05). This means that 46% of their satisfaction is determined by assurance. However, international students are more satisfied or having stronger relationship between assurance and satisfaction.

**Hypothesis 2:**

H<sub>0</sub>: There is no significant relationship between empathy and student satisfaction.

H<sub>1</sub>: There is a significant relationship between empathy and student satisfaction.
The relationship between empathy and student satisfaction was investigated using Pearson correlation coefficients for the two groups of respondents (Malaysian and international students). The results in Table 4.4 indicate a moderate and positive relationship between empathy and student satisfaction exists among Malaysian students (R square = .370, n=245, p< 0.05). This means 37% of their satisfaction is determined by empathy. Meanwhile, the relationship between international students satisfaction towards empathy shows strong and positive relationship (R square = .576, n=245, p< 0.05). This means that 58% of their satisfaction is determined by empathy. However, international students are more satisfied or having stronger relationship between empathy and satisfaction.

**Hypothesis 3:**

Ho: There is no significant relationship between tangibility and student satisfaction.

H₁: There is a significant relationship between tangibility and student satisfaction.

The relationship between empathy and students satisfaction was investigated using Pearson correlation coefficients for the two groups of respondents (Malaysian and international students). The results in Table 4.4 indicate a moderate and positive relationship between empathy and student satisfaction exists among Malaysian students (R square = .370, n=245, p< 0.05). This means 37% of their satisfaction is determined by empathy. Meanwhile, the relationship between international students satisfaction towards empathy shows strong and positive relationship (R square = .576, n=245, p< 0.05). This means that 58% of their satisfaction is determined by empathy. However, international students are more satisfied or having stronger relationship between empathy and satisfaction.

**Hypothesis 3:**

Ho: There is no significant relationship between tangibility and student satisfaction.

H₁: There is a significant relationship between tangibility and student satisfaction.
The relationship between tangibles and students satisfaction was investigated using Pearson correlation coefficients for the two groups of respondents (Malaysian and international students). The results in Table 4.5 indicates, a stronger and positive relationship between tangibles and student satisfaction exists among Malaysian students (R square = .364, n=245, p< 0.05). This means 37% of their satisfaction is determined by tangibility. Meanwhile the relationship between international students satisfaction towards tangibility shows moderate and positive relationship (R square = .255, n=245, p< 0.05). This means that 26% of their satisfaction is determined by tangibility. In this regards, the Malaysian students are more satisfied or having stronger relationship between tangibles and student satisfaction.

Hypothesis 4:

H0: There is no significant relationship between reliability and student satisfaction.

H1: There is a significant relationship between reliability and student satisfaction.

**Table 4.6: The Relationship between Reliability and Student Satisfaction**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysian Students</td>
<td>Model</td>
<td>R</td>
<td>R Square</td>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>1</td>
<td>0.751(a)</td>
<td>.564</td>
<td>.561</td>
<td>.45562</td>
</tr>
<tr>
<td>International Students</td>
<td>Model</td>
<td>R</td>
<td>R Square</td>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>1</td>
<td>0.665(a)</td>
<td>.443</td>
<td>.439</td>
<td>.44132</td>
</tr>
</tbody>
</table>

The relationship between reliability and students satisfaction was investigated using Pearson correlation coefficients for the two groups of respondents (Malaysian and international students). The results in Table 4.6 indicates, a stronger and positive relationship between reliability and student satisfaction exists among Malaysian students (R square = .561, n=245, p< 0.05). This means 56% of their satisfaction is determined by reliability. Meanwhile the relationship between international students satisfaction towards reliability shows moderate and positive relationship (R square = .439, n=245, p< 0.05). This means that 44% of their satisfaction is determined by reliability. In this regards, the Malaysian students are more satisfied or having stronger relationship between reliability and student satisfaction.
Hypothesis 5:

\[ \text{Ho: } \text{There is no significant relationship between responsiveness and student satisfaction.} \]

\[ \text{H}_1: \text{There is a significant relationship between responsiveness and student satisfaction.} \]

Table 4.6: The Relationship between Responsiveness and Student Satisfaction

<table>
<thead>
<tr>
<th>Malaysian Students</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.811(a)</td>
<td>.658</td>
<td>.656</td>
<td>.33456</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International Students</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.677(a)</td>
<td>.459</td>
<td>.455</td>
<td>.43568</td>
<td></td>
</tr>
</tbody>
</table>

The relationship between responsiveness and students' satisfaction was investigated using Pearson correlation coefficients for the two groups of respondents (Malaysian and international students). The results in Table 4.6 indicate a stronger and positive relationship between responsiveness and student satisfaction exists among Malaysian students (R square = .656, n=245, p< 0.05). This means 66% of their satisfaction is determined by responsiveness. Meanwhile the relationship between international students' satisfaction towards responsiveness shows moderate and positive relationship (R square = .455, n=245, p< 0.05). This means that 46% of their satisfaction is determined by responsiveness. In this regards, the Malaysian students are more satisfied or having stronger relationship between responsiveness and student satisfaction.

5.0 CONCLUSION

To determine and assess the students’ satisfaction level with the service quality provided by higher educational institutions is not easy but not impossible. The results can be very helpful in determining the satisfaction level for management of any educational institution to leverage or enhance the services provided. In this study, the results indicated that both groups of students (the Malaysian and international students) have strong relationship with depending variable. The results declared also showed the areas of the university’s service quality that attain the requirements and needs of students and their expectations have better potential to build strong
relationship with student satisfaction. This study also showed that generally the satisfaction level at higher learning institutions in Malaysia are correlated with the service quality offered.

Further research is needed to determine the parameters of the students’ ‘zone of tolerance’. This is important for service provider to gradually improve the quality and allocate resource accordingly. Owing to resource restrictions, rules, regulation, as well as policies, in some instances it is almost impossible for private universities to provide everything that student want. Future research should focus on the perception of service quality from other stakeholders (such as internal customer, government, industries, etc.). A comprehensive study would help the faculty to review and ‘beef-up’ its overall service quality in the education sector.

REFERENCES


