Factors Influence the Satisfaction of International Students at Private Universities in Malaysia

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Abstract: Satisfaction of students in an educational institution has become a strategic issue for university to survive and thrive. Few studies investigate the factors that influence the international student satisfaction. The purpose of this study is to investigate the international student satisfaction. Building on the literature, the study incorporated service quality, price or fees, student-lecturer relationship, and university characteristic as independent variable affect the satisfaction of international student. Data was collected from seven private universities in Malaysia. A total of 202 respondent participated in this study. Using regression analysis, the findings of this study indicated that the most important factor is the university characteristic followed by student-lecturer relationship, prices, and service quality respectively. A practical recommendation was given to decision makers to enhance the international student satisfaction. For future research, it was suggested that to conduct qualitative studies to identify the dimension of international student satisfaction.

Keywords: Student satisfaction, Service Quality, International students, Private University, Malaysia

1. Introduction

Customer satisfaction has been one of the most researched topics in the academia. This is mainly because of the importance of customers for the organizations. In an educational institution, students are the main customers of the organization [1]. Satisfaction of students in an educational institution has become a strategic issue for university to survive and thrive. Universities and colleges around the world strive to offer a high quality international student experience. Not surprisingly, there is a close correlation between satisfaction and willingness to recommend the institution, with all the benefits that implies in terms of referrals and strong alumni relations [2].

From global perspectives, many countries have announced plans to attract international students [2]. In 2014, Canada announced plans to double international enrollment in the next decade [3] while Japan is targeting 300,000 international students by 2020, up from fewer than 150,000 today [4]. China’s goal is to go from 200,000 to 500,000 international higher education students by 2020 [5]. In the United States, international undergraduate students have increased by 70% in the past decade [2]. In Malaysia, the country aims to attract 200,000 international students up from 90,000 currently by 2020 [6].

International student has become important source to support skilled migration strategies or exercise in soft power, and represents massive spending power [7]. From country perspective, students’ satisfaction should always be considered by universities due to intensive competition among universities, internationalization spirit, higher expectation of customer to higher educational institution, an increase in the tuition fee, and the classification of education as a marketable service [8]. Furthermore, student satisfaction is important to be discussed, considering that there is a good effect if the students are satisfied, and vice versa.

Malaysia promotes itself as a hub of educational tourism. However, the competition from regional and global country such as China, India, and Australia is fierce. Locally, there is competition between the Malaysian universities to attract international students [8]. A total of 30% of international students are enrolled in hundreds of private universities. The majority of 70% are enrolled in 20 public universities in Malaysia [6]. Due to the tough competition, a university has to know how to satisfy its students. This is because satisfied student can contribute in many ways for the university success. This includes the financial contribution, academic contribution, and promoting positive word of mouth, which will affect the university reputation [31].

Previous studies showed that the majority of literature focuses on the customer satisfaction in business organization e.g.,[21],[22]. International student satisfaction has received little attention from researcher in general and in Malaysia in particular. Few studies have been found to investigate students’ satisfaction e.g. [23]. Ibrahim, Rahman and Yasin [24] have called for more studies in international students’ satisfaction and its relationship with service quality, management of the institutes, and institutes environment.

The purpose of this study is to investigate the factors that influence the international students’ satisfaction at private universities in Malaysia. This paper consists of five sections. First section presents the background and highlighted the issues of the study. Second section presents the literature review. Third section, presents the research methodology. Fourth section presents the result and the discussion. Lastly, the fifth section presents the conclusion and the future works.

2. Literature Review

2.1 Students Satisfaction

Student satisfaction is crucial to the success of student during their studies. Huang and Wang [9] pointed out that student satisfaction refers to the student’s perception or attitude
towards the learning activities. Where the student is happy with his/her studies or adopts an aggressive learning attitude, student is deemed to be “satisfied”; where the student is unhappy or adopts negative or passive attitude, student is deemed to be “dissatisfied”. Student satisfaction has been described as a superior emotional complex that, according to [10] can be defined as the level of joy a person experiences when learning, being placed first of the two goals that adult students are trying to achieve by joining learning activities, the second pertaining to the learning outcomes [11].

Gibbons et al. [24] identifies learning satisfaction with the level of coherence between the individual’s expectations and his actual experience. In a situation where the individual’s real experience is equal or succeeds his expectations, the individual feels satisfied, as opposed to an experience that is under his expectations thus making him feel unsatisfied [11].

According to the Equity Theory, satisfaction exists when consumers perceive their output/input ratio as being fair [12]. Parties to an exchange will feel equitably treated, thus, satisfied, if in their minds, the ratio of their outcomes to inputs is fair (13). Whether a person feels equitably treated or not may depend on various factors including the price paid, the benefits received, the time and effort expended during the transaction and the experience of previous transactions (14).

The rapid expansion of colleges and universities, significant increases in college education costs combined with demographic shifts in the population may force colleges to think differently about the role of student satisfaction for their survival (15). The mission of education is not only to influence knowledge but also to enhance the student’s total development (16). Colleges and universities use student satisfaction data to better understand, improve, and change campus environments, thereby creating settings more conducive for student development. In this sense, student satisfaction is an indicator of the institution’s responsiveness to students’ needs and a measure of institutional effectiveness, success, and vitality (17).

Letcher and Neves [18] pointed out that psychologists have found that student satisfaction helps to build self-confidence; and that self-confidence helps students develop useful skills and acquire knowledge. On the other hand, student dissatisfaction can lead to negative student activities, such as a bad grade, an unpleasant relationship between the student and the staff, faculty, and friends (18).

Bitner et al. [19] pointed out that service providers will only be able to deliver service encounters that will satisfy customers if they know what their customers want. If universities know how their students perceive the offered services, they may be able to adapt their services to a certain degree, which should have a positive impact on students’ perceived service quality and their levels of satisfaction. Oldfield and Baron (20) pointed out “there is an inclination to view service quality in higher education from an organizational perspective”. They suggest that institutions should better pay attention to what their students want instead of collecting data based upon what the institution perceives its students find important.

Similarly, [26] point out that research on service quality in higher education has relied strongly on the input from academic insiders while excluding the input from the students themselves. They believe that traditional approaches leave decisions about what constitutes quality of service exclusively in the hands of administrators and/or academics. The authors, therefore, suggest that academic administrators should focus on understanding the needs of their students, who are the specific and primary target audience. Similarly, [27] suggest that the student experience and its improvement should be at the forefront of any monitoring of higher education quality.

2.2 Related Studies

The literature reveals that there are many studies have attempted to investigate the students’ satisfaction at higher educational institutions. Sumanedi et al. [28] have investigated the student satisfaction. They incorporated as independent variables student perceived service quality and student perceived prices. Data was collected via questionnaire from 155 respondents. The findings indicated that service quality and perceived price have significant influence on student satisfaction. In a wider approach [29] studied the impact of two main constructs that include sub variables. Service quality included sub variables such as tangibles, assurance, empathy, responsiveness, and reliability. Second construct is price, which included monetary price and non-monetary price. However, the study was conceptual and the outcome of the study was a proposed model. Similarly, [30] investigated the impact of tangible elements, reliability, and the compliance with university value on the student satisfaction. Data was collected from 310 respondents using questionnaires. The findings indicated that tangible elements, reliability, and the compliance with university value has strong influence on students satisfaction. Tangible elements has the strongest influence.

Huang and Wang [9] conducted a study to find the factors that influence student satisfaction. Collecting data using a questionnaire, the findings indicated that student self-learning achievement has the strongest effect on overall learning satisfaction. This is followed by students’ satisfaction toward combination of class design and practice exams and satisfaction in learning environment.

Many other attempts have been made to discover student satisfaction. Katircioglu et al. [31] focused more on service quality and they incorporated factors such as tangibles, reliability, assurance, empathy. They studied the impact of these factors on overall satisfaction and word of mouth. Collecting data from 579 respondents using a questionnaire, the findings indicated that empathy has strong influence on overall satisfaction. Overall satisfaction has a strong influence on word of mouth. The study of [23] in Malaysia has solely tested the impact of paralanguage on student satisfaction. Data was collected from 300 students in Malaysia. The findings showed that Paralanguage influences strongly the students’ satisfaction.

Hameed and Amjad [32] tested a model consists of three independent variables that include faculty, advisory staff, and classes. Data was collected from 157 students. The
findings indicated that faculty and classes have significant influence on student college experience. On the other hand, students’ college experience influences significantly satisfaction. In similar approach to the above study, [33] conducted a study and tested the same variables. The findings indicated that faculty and classes has significant influence on students’ partial college experience. Student college experience influences significantly the satisfaction.

Based on above, this study proposes that services quality, price, student-lecturer relationship, and university characteristic influence the international student satisfaction.

3.2 Pre-test and data collection

Pre-test was conducted to ensure that the instrument is reliable. A total of 30 master students answered the questionnaire at one private university. The reliability was checked and found acceptable in pilot and field study. Service quality alpha was .83, price and fees’ alpha was .82 while relationship between student and lecturer was .80, university characteristics was .83 and student satisfaction is .82. The data was collected manually and online. Respondents were volunteers. A total of 202 questionnaire were return complete and usable. This made the response rate 55%, which is acceptable, compared with other researchers who have done research in this area.

4. Findings

Respondents are international student. A majority of 68.8 percent of the respondents are males. A total of 45 percent of the respondents are in the age group of 29-36 year followed by 26.2 percent in the age group of 37-43 and 24.3 percent in the age group of 22 to 28 years. More than 73 percent of the respondents are younger than 36 years. In term of educational background, almost 92 percent of the respondents have formal education range from bachelor degree to doctoral level. The majority of 72 percent of respondents have been in Malaysia for more than 3 years.

4.1 Descriptive of Variables

This section provides a descriptive analysis of the variables. The mean score value is interpreted based on the Table 1 below:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>3.15</td>
<td>.76045</td>
</tr>
<tr>
<td>Price</td>
<td>3.14</td>
<td>.79357</td>
</tr>
<tr>
<td>Student-Lecturer</td>
<td>3.07</td>
<td>.80270</td>
</tr>
<tr>
<td>University Characteris</td>
<td>3.45</td>
<td>.74384</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>3.30</td>
<td>.84969</td>
</tr>
</tbody>
</table>

Table 1 shows that the highest mean score value of 3.45 are for university characteristic. This indicates that the respondents have placed their agreement on the items of the statement of the variable. An overall mean score value of 3.30 is given to the student satisfaction. This shows that the respondents have moderately agreed on the items of statement. This is followed by service quality, and prices and fees, with overall mean score value of 3.15 and 3.14 respectively. The lowest mean score value of 3.07 is given to the student lecturer relationship.

4.2 Pearson Correlation

In order to test the hypotheses of this study, a regression analysis is employed. However, before applying the regression, the Pearson Correlation is employed to check the correlation between the variables. Table 2 shows the results of Pearson correlation analysis. It shows that the correlations between the variables are within the acceptable range.
factors of this study namely, service quality, price and satisfaction can be explained by the four independent variables. The value of $R^2$ equals to 0.647. This indicates that 65 percent of the variation in the international student satisfaction is explained by the regression model. The independent variables are priced as follows: service quality with beta of 0.179, student lecturer relationship with beta of 0.126. The last variable is price or fees with beta of 0.005. The second hypothesis of this study predicted the relationship between price or fees and the international student satisfaction to be significant. The relationship is significant ($R= 0.126, P< 0.05, N=202$). The findings can be interpreted, as the positive perception of price will lead to more satisfaction. It could be interpreted that the amount of prices or fees of the university are equal to the value that the student obtained from the university represented by the educational and non-educational services. This finding is in agreement with the literature. The major concern for students is the tuition fees that they have to pay to obtain the educational services (22). Thomas and Galambos [39] found there is significant relationship between prices and students satisfaction. Perceived price has been considered as a main determent of the student satisfaction. Sumaedi et al. [28] found significant relationship between price and the student satisfaction. Thus, universities have to give the student educational and non-educational services that are equal to the value of money that they paid.

The third hypothesis of the study proposed that the relationship between student satisfaction and their lecturer is one of the factors that increase the international students’ satisfaction. The relationship between student and lecturer has significant impact on the international student satisfaction ($R=0.380, P$-value$<0.05, N=202$). The relationship between the service providers (Lecturer) and the service receiver who are the students. Sohail and Shaikh [40] pointed out that the only determinant of student satisfaction is the good relationship between students and lecturer. They [33] found that the relationship between advising staff and student satisfaction is significant. It could be concluded that the relationship between the students and their lecturer is important indicator of the international students’ satisfaction. A satisfied student will be more encouraged to ask questions and discuss related matters with his lecturers. Thus, relationship between students and their lecturers is a factor of international student satisfaction.

The fourth hypothesis of this study predicted the relationship between university characteristic and the international student satisfaction to be significant. Findings showed that university characteristic is the most important indicators of international student satisfaction ($R= 0.431, P$-value$=0.05, N=202$). The physical environment of higher educational institution could lead to student’s satisfaction (34).

### 4.3 Multicollinearity Test

Collinearity test is conducted to find the Collinearity between the variables. Table 3 shows that there is no Multicollinearity between the variables because the VIP value is less than 10 and the sig greater than 0.10. This indicates that the variables are not correlated with each other and they do not predict each other.

### 4.4 Result of Hypotheses Testing

A regression analysis was conducted to find the effect of the independent variables on the dependent variables. Table 4 shows the result of the linear regression analysis.

### Table 2: Pearson Correlation

<table>
<thead>
<tr>
<th></th>
<th>SQ</th>
<th>Price</th>
<th>SLR</th>
<th>UC</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>.702</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLR</td>
<td>.760</td>
<td>.702</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UC</td>
<td>.611</td>
<td>.583</td>
<td>.720</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SS</td>
<td>.711</td>
<td>.677</td>
<td>.700</td>
<td>.711</td>
<td>1</td>
</tr>
</tbody>
</table>

<0.05, N=202

Note: SQ: service quality, SLR: student lecturer relationship, university characteristic, and SS: student satisfaction

### Table 3: Multicollinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Collinearity Statistics</th>
<th>tSig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>1</td>
<td>Service Quality</td>
<td>.475</td>
<td>2.107</td>
</tr>
<tr>
<td></td>
<td>Price &amp; Fees</td>
<td>.312</td>
<td>3.203</td>
</tr>
<tr>
<td></td>
<td>Student Lecturers Relationship</td>
<td>.392</td>
<td>2.550</td>
</tr>
<tr>
<td></td>
<td>University Characteristic</td>
<td>.534</td>
<td>1.871</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Student Satisfaction

N=202

### Table 4: Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>tSig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std_Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Service Quality</td>
<td>.179</td>
</tr>
<tr>
<td></td>
<td>Price &amp; Fees</td>
<td>.126</td>
</tr>
<tr>
<td></td>
<td>Student Lecturer Relationship</td>
<td>.380</td>
</tr>
<tr>
<td></td>
<td>University Characteristic</td>
<td>.431</td>
</tr>
</tbody>
</table>

R <0.05, N=202, P<0.05

The table shows that the four hypotheses were accepted. The highest predictor of international student satisfaction is university characteristic with beta of 0.431 followed by student lecturer relationship with beta of 0.380, service quality of 0.179 and lastly, price or fees with beta of 0.126. The value of $R^2$ square equals to 0.647. This indicates that 65 percent of the variation in the international student satisfaction can be explained by the four independent variables of this study namely, service quality, price and fees, student – lecturer relationship, and university characteristic.

### 4.5 Discussion

This study has developed four main hypotheses related to the relationship between the independent variables and the dependent variable. The first hypothesis of this study predicted that the relationship between student satisfaction and the service quality should be significant. Based on the result of regression analysis, the relationship is significant and positive. ($R= 0.179, P$-value$< 0.05, N=202$). Shekarchizadeh et al. [38] found that the service quality of university have a strong impact on international student satisfaction. Another study conducted by Slethaug and Manjula (2012) found that frustration with services provided by the university result in dropping courses and leaving the university. Sumaedi et al. [28] found positive relationship between service quality and student satisfaction. Similarly, [29] proposed that the relationship between service quality and international students satisfaction is direct and significant. Thus, it can be concluded that the service quality is one of the factors that influence the international students’ satisfaction in Malaysian private universities.
and Wang [9] pointed out that the relationship between the combination of class design and students satisfaction is significant. Wells and Daunt [34] propose a conceptual model where the physical environment of a higher educational institution can lead to student satisfaction as an outcome. Sojkin et al. [41] identified social conditions and educational facilities among the key determinants of student satisfaction in higher education. Thus, it can be seen that the most important indicator of the international students’ satisfaction is the university characteristic include the physical design, entertainment facilities such as football pitch and swimming pool in addition to the design of classroom and the environment inside the class.

5. Conclusion, Implication, and direction for Future works

This study has been conducted in Malaysia. Seven private universities were the target population of this study. The hypotheses of this research were tested by employing regression analysis. The findings revealed that all the hypotheses were accepted. Decision makers have to focus on the international student satisfaction to increase the number of international students in their universities. A key area to focus on is the university characteristic. Entertainment environment must be created at the university where fun and study can be mixed together. The decision makers also must create a culture where students and their lecturers can meet and discuss so that the relationship can be enhanced.

Quality of education plays vital role in the satisfaction of students. Most of the discussed literature showed that the service quality is one of the most important indicators of satisfaction. Services include the educational services that are provided by the academic staff and the non-educational services that are provided by the non-academic staff. The relationship between non-academic staff who are the frontline employees that provide the non-educational services to students should be enhanced.

Prices have been always associated with satisfaction. The lower the prices the more likely that the student to be happier. A high price with low level of service including educational and non-educational services will result in less satisfied students. Tuition fees of the university should be compared with other universities that provide the same educational services. This enables the university to have a benchmark in term of prices. Further, the university can increase the prices of tuition based on its services. Unique services enable the university to impose premium prices however; average educational services will only entitle the university to impose average prices.

Communication between the students and their lecturer is important to increase the satisfaction of international student. Creating an environment where students can informally meet and discuss with their lecturer is a way to increase the interaction and reduce the gap between the two parties. In formal way, the university can create a periodical meet with their lecturer to discuss the issue that can hinder the satisfaction of students.

University environment plays major role in increasing the satisfaction of international student. The existence of leisure facilities such as football yard, swimming pool, transportation facilities, and restaurant increase the student satisfaction. This is because, these facilities are essential for the students during the time of study.

Student satisfaction is a major area of research study and is quite interesting. Due to time considerations, this study was limited to seven private universities and was only among international students. Therefore, the following studies can be conducted to further the endeavor of this study: Future researcher can be carried to compare the satisfaction between student in private and public universities. This could be conducted by taking three private and three public university and distribute a questionnaire to find the international student satisfaction. Few studies were found to investigate the international student satisfaction using quantitative approach. There is need for a qualitative study that can identify the dimension of the international student satisfaction. Such study can be conducted using an interview approach or focus group approach to closely examine the factors that affect the international student satisfaction. This study was limited to only four variables. Further study can be conducted by incorporating some other variables such as the culture, proficiency of English language, cost of living, security, ranks of the university and so on.

Lastly, the university must periodically assess the satisfaction of student by conduct survey that can identify the area that needs improvement. Doing so will provide the university with positive word of mouth and encourage other student to join the university. Ultimately, this will lead to more competitiveness and create the opportunity for more revenues and better international academic rank.

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