FACTORS AFFECTING CHOICE FOR EDUCATION DESTINATION:  
A CASE STUDY OF INTERNATIONAL STUDENTS AT UNIVERSITI UTARA MALAYSIA

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ABSTRACT

The importance of higher education services as a new source of income has intensified the effort not only by the developed nations but the developing countries alike, to offer their services to the international students. Most countries recognize that maintaining quality education is crucial as to ensure the long term competitiveness. Quality education signifies a very broad definition and it is vital for each country to correctly identify the factors that really attract international students to pursue their studies in particular places. With regard to the issue, this study attempts to identify the possible factors that may influence the decision making of international student when choosing higher education destination. In order to arrive at the result, we carry out the study by determining the factors that significantly influence the international students to recommend Universiti Utara Malaysia (UUM) to their friends in their home country. The study is conducted using a sample of 300 international students. The factor analysis and a regression using the logit model are used. The finding suggests that excellent services, pleasant social environment, first class physical infrastructure and high quality of lecturers matter.

Keywords: international students; higher education destination, quality education.
I. INTRODUCTION

The internationalisation of higher education is defined as the mobility of students from a country (home country) to another country (host country) which offers higher education services with the intention to further their higher education. This is in fact a feature of globalisation where higher education services have evolved into a business sector capable of generating revenue to the country since the 60s and the 70s up until now. Most of the developing nation and under developed nation send their students to study abroad to develop their human capital so that in the future these students can bring back the knowledge from the developed nation. Therefore, countries like the United Kingdom, Germany, United States and Australia have begun to invest in the higher education sector since the 60’s. At the global stage, the average inflow of international students is 9% between 1960 until 1970. The higher education institutions there begun to take steps to attract students from Asia and Africa like Malaysia, Singapore, China, India and etc.

With regards to the education industry in Malaysia, it has been growing rapidly and has now become an export service for the nation. Private higher educational institutions have gained a very good reputation for themselves in the regional and international markets. More and more foreign universities are establishing their overseas campuses in Malaysia, (MATRADE\textsuperscript{1}, 2007). By this year (2010) the Malaysian government has targeted at least to attract 100,000 international students to further their studies in Malaysia. According to a statistic from the Malaysia Higher Education Ministry, until the year 2007, there were 47,928 international students studying in all higher education institutions in Malaysia. Out of this total number of international student, nearly 30% are studying in the government higher education institutions (IPTA) while the balance 70% are studying in the private higher education institutions (IPTS).

Looking at the increasing numbers of enrolment it is therefore not surprising that at the international front, Malaysia has successfully position herself to become a competitive regional higher education hub. Towards this end, Malaysia is ready to compete with other host countries especially in South East Asia in attracting the international students. Thus, in order to become a competitive destination, it is important for Malaysia to identify the real factors that attracts international students to choose Malaysia as the best place to pursue their studies. In the Ninth Malaysia Plan (RMK-9), the Malaysian government has suggested a few steps which should be taken to make the higher education hub successful. Some of the steps include increasing the liberalisation and deregulation, increasing the academic standards and intensifies the promotion of Malaysia as a Centre of Excellence in higher education. The government has also enacted the Education Act\textsuperscript{2} so that universities and colleges

\begin{itemize}
\item \textsuperscript{1} Malaysia External Trade Development Corporation, the National Trade Promotion Agency of Malaysia
\item \textsuperscript{2} The Private Higher Education Institutions Act 1996. A study by Tham and Kam (2007) stated that the its primary function is to formulate policies and setting the direction private institutions of higher education in Malaysia. Specifically, this sector processes applications for the establishment of
\end{itemize}
from other countries can build their campuses here in Malaysia. The Act provides the framework or scope for the development of Private Higher Education Institutions (PHEI) in the country. The experience by other countries that have succeeded in the business of higher education can also be used as a benchmark for Malaysia. As experienced by other countries, studies have shown that pull factors play an important role in determining students’ choices. Among the pull factors are reputation, economics and social factor which will be explained in detail in the next section.

Realizing that identifying the right factors are crucial in attracting international students, this paper attempts to investigate and identify these factors by using the data obtained from international students at the Universiti Utara Malaysia. It is hoped that through this research some policy recommendations can be drawn up to help UUM in particular and Malaysia in general to become a regional higher education hub.

The study consists of 5 sections. Following an introduction in section I, section II discusses the literature review related to the study. Section III explains about the data and the method used in the analysis. Section IV provides the findings followed by conclusion and policy recommendations in section V.

II. Review of Literature

There are quite a number of studies that have been carried out to identify factors that affect student’s decision in choosing higher education destination. Basically the factors can be classified into two i.e. the ‘pull factor’ and the ‘push factor’. The pull factors relate to the factors associated with the benefits or advantages offered by the host country, for example fees charged, reputation of the institutions, social, culture and values, facilities and etc. On the other hand the push factors are those factors associated directly with the home country such as the level of wealth of the population, the priority of education, the openness of the economy and the educational opportunities available at home. Both of the factors i.e the pull and the push factors are in fact important factors in determining the international mobility of students in searching for better education. But nevertheless, it is interesting to note that the pull factors are the factors in which the host countries have the control. Thus it is crucial to identify what are the pull factors which really affect the students’ decision in choosing their higher education destination.

Yang (2007), for example investigates the factors that influence students from China to choose higher institutions in Australia. In his analysis he uses two groups of Chinese students i.e. those who are contemplating to choose higher education in Australia and those who currently studying at the University of Central Queensland in Australia. For the first group, his finding shows that the reputation of the university is found to be the most important and significant factor. The students are in the opinion that high reputation of the institution is translated into high reputation for their degree and therefore will enable them to have better opportunities not only in their home country but as well as in Australia. For the second group his study found that low education fees and low cost of living as the two most significant factors.

such institutions, sets standards, enforces and regulates laws, manages the collection of fees, supplies services such as providing people with advice, guidance, counselling and consultation, and collects data and information about this sector.
Another study by Mazzarol and Soutar (2002) which was carried out on students from four different countries namely China, Taiwan, Indonesia and India also found similar result where the reputation of the institution is ranked the highest. However they further added that the reputation of the quality staffs as another important factor. Cubillo, Sanchez and Cervino (2006), states that the image of the institution is important in attracting the international students. They also agree that other factors such as reputation, quality and expertise of the academic staff, the facilities provided by the institution and international recognition are of equal important. With regards to services offered, Kinnell (1989) reiterated that the institutions of the host country should be able to supply appropriate information, provide good advice and offer help to the international students as to create favourable first information. Price, Matzdorf, Smith & Agahi, (2003) reported that facilities provided by the institutions as the most important factors. As far as regulations are concerned Maringe and Carter (2007) stated that efficient application process and lesser bureaucracy attract students to choose United Kingdom as their higher education destination. A study by Mei and Bray (2007) found that social and cultural experiences are among other factors that play important role in attracting students from China to choose Macau and Hong Kong as their destination.

Based on these empirical evidences, it is in the interest of this paper to investigate what are the factors that attracts international students to pursue their degree in Malaysia by using Universiti Utara Malaysia (UUM) as a case study. In this paper, rather than directly ask the students on what are the factors that are significantly affect their decision, we obtain the results by identifying what are the factors significantly influenced the international students to recommend UUM to their friends in their home country as their higher education destination.

III. DATA AND METHOD

The research is carried out at the University Utara Malaysia (UUM). The target population of this research is all the international students from China, Africa, Middle East and South East Asia. However, the details of population frame are not available. Nevertheless, the postgraduates and Academic Affair Department (HEA) of UUM are willing to disclose the aggregate statistic of the target population as presented in Table 1. Basically there are a total of 1,698 students from China, Africa, Middle East and South East Asia. This study uses proportionate quota sampling design, i.e., for each region, a percentage of respondents are chosen (Table 1). Out of the total population the sample size of 300 respondents are gathered in which 62 (21%) from China, 58 (19%) from Africa, 107 (35.5%) from South East Asia and 73 (24.5%) from the Middle East.

<table>
<thead>
<tr>
<th>Region</th>
<th>Population Number</th>
<th>Population Percentage</th>
<th>Sample Number</th>
<th>Sample Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>349</td>
<td>21</td>
<td>62</td>
<td>21</td>
</tr>
<tr>
<td>Africa Nation</td>
<td>329</td>
<td>19</td>
<td>58</td>
<td>19</td>
</tr>
<tr>
<td>South East Asia</td>
<td>604</td>
<td>35.5</td>
<td>107</td>
<td>35.5</td>
</tr>
<tr>
<td>Middle East</td>
<td>416</td>
<td>24.5</td>
<td>73</td>
<td>24.5</td>
</tr>
</tbody>
</table>
Figure 1 shows the distribution of respondents by gender where 61% are males and the rest 39% are females. With regard to the distribution by age, majority of the respondents (55.7%) are of the age of 20 -25 years old (figure 2). From the data collected, 57.5% are first degree students, 31.3% Masters Degree and 11.3% are pursuing PhD. Pertaining to the duration or period that they have spent in UUM, 71% stated that they have been in UUM between 1 to 5 years, 28% for less than a year and 1% more than 5 years. Apart from duration the students were asked pertaining to their previous education institutions. With regards to this, 95.7% of those who are studying Masters Degree obtained their first degree at overseas universities.
In this study the Factor Analysis and Logistic Regression are employed. We introduced 40 items in the questionnaire, distributed to the respondents. From these 40 items, we try to classify them into a number of factors. Using a Likert Scale of 1 (strongly disagree) to 5 (strongly agree), we then asked the students to states their perceptions using the scale as to measure their level of satisfaction with regards to different factors. The mean for each factor is used to identify how far they are satisfied with UUM. The model for a logistic regression can be stated as follow:

\[
\ln\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 \text{REGION}_i + \beta_2 \text{REGION}(1)_i + \beta_3 \text{REGION}(2)_i + \beta_4 \text{REGION}(3)_i + \\
\beta_5 \text{SEX}_i + \beta_6 \text{EDU}_i + \beta_7 \text{EDU}(1)_i + \beta_8 \text{EDU}(2)_i + \beta_9 \text{finance}_i + \beta_{10} \text{finance}(1)_i + \beta_{11} \text{finance}(2)_i + \\
\beta_{12} \text{SERVICE}_i + \beta_{13} \text{SOCIAL}_i + \beta_{14} \text{INFRASTRUCTURE}_i + \beta_{15} \text{REPUTATIONLEC}_i + \beta_{16} \text{ECONOMY}_i + \beta_{17} \text{RECOGNITIONCERT}_i + u_i
\]

Where,
\[P_i = \text{E(RECOMMAND}=1 \mid X_s )\]
RECOMMAND = recommendation of the international student who are currently in UUM to their friends in their home country
\[X_s = \text{all independent variables (as listed below)}\]
REGION = Middle East
REGION(1) = China
REGION(2) = Africa Nation
REGION(3) = South East Asia
SEX = Male and female students
EDU = PhD students
EDU(1) = First degree students
EDU(2) = Master degree students
Finance1 = Parent’s support
Finance1(1) = Self-support
Finance1(2) = Scholarship/loan
SERVICE = the quality of services and the information being provided by the administrative staff in HEA, HEP, hostel, co-curriculum and other department
SOCIAL = Social life which includes safety level, discrimination in terms of races, life style, environment, cultures, religion, language, weather and food.
INFRASTRUCTURE = The quality of physical infrastructure i.e; accommodation, computer lab, cafeteria, sport centre, health centre, public transport and the wireless internet service.
REPUTATIONLEC = The quality and recognition of UUM’s academic staff such as their publication in international journal
ECONOMIC = The education fees and the cost of living in Malaysia.
RECOGNITIONCERT = The recognition on UUM degree, master degree and PhD at the international level.
\[u_i = \text{The stochastic error terms}\]
IV. THE RESULTS

From the factor analysis, 6 factors have been identified by interpreting the item (variables) onto the components. The variables chosen are those variables with factor loading of more than 0.5. Component 1 is identified as service factor, component 2 as social factor, component 3 as infrastructure, component 4 refers to reputation of lecturers in UUM, component 5 as economic factor and component 6, the last component is identified as a factor relates to the recognition of the degree.

The analysis of mean is used to identify the level of satisfaction of the international students based on the six components or factors that have been identified. The summary of the results is presented in Table 2.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Service</td>
<td>3.19</td>
</tr>
<tr>
<td>2. Social</td>
<td>3.48</td>
</tr>
<tr>
<td>3. Infrastructure</td>
<td>3.08</td>
</tr>
<tr>
<td>4. Reputation of Lecturers/Institution</td>
<td>3.28</td>
</tr>
<tr>
<td>5. Economics</td>
<td>3.31</td>
</tr>
<tr>
<td>6. Recognition of Certificates</td>
<td>3.31</td>
</tr>
</tbody>
</table>

From the 6 factors identified, generally the students are satisfied with all the factors. Social factor scores the highest mean which signifies that on average the students are satisfied with social life in UUM in particular and in Malaysia in general. These include culture, lifestyle, the study environment as well as the weather. Factor which relates to infrastructure scored the lowest but still satisfactory. The items include in this factor are facilities in computer labs, bus service and sport centre.

The summary of the results for the logistic regression is presented in Table 3.

<table>
<thead>
<tr>
<th>Step 1(a)</th>
<th>B</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East</td>
<td>-0.35</td>
<td>0.51</td>
<td>0.71</td>
</tr>
<tr>
<td>China</td>
<td>0.95</td>
<td>0.04</td>
<td>2.58</td>
</tr>
<tr>
<td>Africa</td>
<td>0.38</td>
<td>0.46</td>
<td>1.46</td>
</tr>
<tr>
<td>South East Asia</td>
<td>0.30</td>
<td>0.42</td>
<td>1.36</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.76</td>
<td>0.26</td>
<td>0.47</td>
</tr>
<tr>
<td>PhD</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Mean Score

Table 3: Summary of the Results
<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master degree</td>
<td>-1.67</td>
<td>0.01</td>
<td>19</td>
</tr>
<tr>
<td>Parent’s support</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-support</td>
<td>0.01</td>
<td>0.97</td>
<td>1.01</td>
</tr>
<tr>
<td>Scholarship/loan</td>
<td>-0.63</td>
<td>0.27</td>
<td>0.53</td>
</tr>
<tr>
<td>Service</td>
<td>0.45</td>
<td>0.00</td>
<td>1.57</td>
</tr>
<tr>
<td>Social</td>
<td>0.44</td>
<td>0.00</td>
<td>1.55</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>0.34</td>
<td>0.02</td>
<td>1.40</td>
</tr>
<tr>
<td>Reputationlec</td>
<td>0.48</td>
<td>0.00</td>
<td>1.62</td>
</tr>
<tr>
<td>Economy</td>
<td>0.02</td>
<td>0.90</td>
<td>1.02</td>
</tr>
<tr>
<td>Recognitioncert</td>
<td>0.17</td>
<td>0.29</td>
<td>1.18</td>
</tr>
<tr>
<td>Constant</td>
<td>1.35</td>
<td>0.07</td>
<td>3.84</td>
</tr>
</tbody>
</table>

In this model, the independent variables that are significant are Middle East, Africa, Master degree student, and PhD student, Service, Social, Infrastructure and Reputationlec. The variables show that compared to the Middle East student, students from Africa have higher probability to recommend UUM to friends in their home country by the odds ratio of 2.58 times, ceteris paribus.

If compared to the PhD students, it shows that master degree students have a lower probability to recommend UUM to friends in their home country. The odds of recommending UUM from master degree students are 0.19 times the odds of PhD students, ceteris paribus.

From Table 3, it clearly shows that the quality of services and the information that is provided by the administration staff in HEA, HEP, hostel, co-curriculum and other departments is expanding in an increasing probability for the international students to recommend UUM to their friends in their home country by the odds ratios of 1.57 times, ceteris paribus. The social life in UUM shows an increasing probability for the international students in recommending UUM to their friends in their home country by the odds ratios of 1.555 times, ceteris paribus. The quality of physical infrastructure that provided by UUM shows an increasing probability in recommending UUM to their friends in their home country by the odds ratios of 1.399 times, ceteris paribus. The quality and recognition of UUM’s academic staff shows an increasing probability in recommending UUM to their friends in home country by the odds ratios of 1.623 times, ceteris paribus.

In short, it is found the quality of services, social life, physical infrastructure and lecturer’s reputations have significant positive impact on increasing the probability in recommending UUM.

V. CONCLUSION

According to the finding, the levels of satisfaction among students for the six factors measured through mean shows that students are slightly satisfied. Those factors are service, social, physical infrastructure, reputation of lecturer, economy and recognition of certificate factor. The research also shows the result that out of the four regions, the international students from the Middle East and Africa are more likely to
recommend UUM to their friends in their home country as their higher education destination. Besides that, the research also shows that the international students who are currently studying PhD have more probability to recommend UUM to their friends in their home country compared to those who are studying at the Masters degree. With regards to the factors, service, social, physical infrastructure and reputation of lecturers are significantly influenced the international students to recommend UUM to their friends in their home country as their higher education destination. Thus our finding confirmed the previous empirical evidence. Our study also shows that the economic factor does not have a significant impact. As far as the qualities of lecturers are concerned, the university has to intensify their effort in recruiting quality lecturers especially those with PhD and actively involved in research and publications. In this regards, the Ministry of Higher Education is in the right direction in promoting quality staff. One of the criteria that have been imposed is that, in order for universities to become a research university, at least 70% of the academic staff should be PhD holders. Apart from that, the ranking of the university also pay much consideration on research and publication by the academic staff at the international level.

REFERENCES


