

Why Malaysia? International Students Choice Criteria for Higher Learning's Selection

Rohaizat Baharun,¹ and Siti Falinda Padlee²

University of Technology Malaysia¹
81310 UTM Skudai, Johor
e-mel: m-rohaizat@utm.my *
Tel:+606-5531823

College University of Science and Technology, Malaysia²
21030 Kuala Terengganu
e-mel: lindahpadlee@yahoo.com

* correspondent writer

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Abstract

Purpose: The purpose of this study is to examine the higher learning institutions selection criteria of international students in the Malaysian education system especially at private higher learning institutions. This paper was based to finding out the factors international students consider important in their decision making process to choice of Malaysia as their education destination.

Design/methodology/approach: Respondents, who are international students intending to study in private higher institutions, were surveyed with an instrument based on the previous studies. A survey questionnaires design based on a 6 point Likert scale which included 48 choice factors. Data from 656 international students were subjected to principal components analysis to ascertain factors related to their criteria to study in Malaysia. Factor analysis and MANOVA were conducted for this study.

Findings: Results indicate that six factors have a strong impact on international students' decision-making process. The results have important implications for market positioning strategy and strengthen higher learning institution offerings in these factors.

Research limitations/implications: All the factors identified in this study are considered important by the international students for Malaysian context only. This study only looks at destination country rather than the specific institutions as destination.

Practical implications: Results indicate six most important determinants of HEI preferences, which have significance for education managers developing marketing strategies for their HEIs.

Originality/Value: This is believed to be the first study carried out among international students in the Malaysian private higher institutions. HEIs could adapt and apply these factors to develop their own marketing plans.

Keywords: International students, Higher learning, Selection, Choice criteria, Malaysia.

Paper type: Research paper

Introduction

In most countries all over the world, tertiary education industry has experienced a number of significant changes. According to Hemsley-Brown and Oplatka (2006), higher learning institutions (HEIs) are widespread and well-established as a global phenomenon, especially in the major English-speaking nations such as the US, UK, Australia, Canada and New Zealand. In the US for example, HEIs is undergoing substantial change in terms of the way colleges and universities are organized and function because of factors such as demographics, globalization, economic restructuring and information technology. These changes lead the US HEIs to adopt new conceptions of educational market and organizational structures. As the competition among them in the higher level intensifies, they increasingly behave as business entities by adopting more business strategies. In recent years, they have to promote the acceleration of international linkages, brand campuses, single purpose programs and other forms of transnational education and quality of education for the customers. However, the task for all activities mentioned above is not always easy to remain competitive in the eye of customers at the global environment. Other variables such as government intervention, international law, different custom procedures, variety of languages, foreign exchange, different costs, different behaviors, perception, and life styles become the challenges for higher learning institutions in trying to provide a quality and sustainable education program. Paramewaran and Glowacka (1995) in their study of university image found that, HEIs need to maintain or develop a distinct image to create a competitive advantage in an increasingly competitive market. In a number of countries, governments have been at pains to stress the economic benefits resulting from higher education (Yorke, 1999). As we know that, the education market is worth hundreds of billions of dollars in today's market, and every week sees a new joint-venture is announced by traditional or new players all over the world, as they jockey for position in this increasingly global market. In the Malaysian context, the Malaysian government in the 1980's recognized that it would be unable to educate more than 6 percent of its population through its own institutions and began to partner with international

institutions to supplement its system of higher education (Lenn, 2000). Traditionally from the last 50 years, many Malaysians are being sent to a host country especially to the English speaking nations to study at chosen HEIs.

Further more, in recent years, this move has led to the government inviting foreign universities to operate in Malaysia. With the move, the government has made another important decision; to turn Malaysia into an educational hub in the region. For both public and private HEIs, they have to take more ownership and responsibilities for the overall products and services that they are offering to their customers. Therefore, many HEIs have already adopted some forms of business strategies, especially in marketing, for their strategic activities in their operations.

For the higher education industry, students can become potential campus customers. In globalization concept, a majority of students know that in order to be successful in this environment, they must develop some key global skills and one of them is attaining international higher education qualification. However, in the literature, there is little agreement on the identity of the '*higher education customers*'. The concept of *customers* is not clearly defined, which makes higher learning institutions difficult to manage from the marketing point of view (Navarro, Iglesias and Torres, 2005). The '*stakeholder concept*' rather than '*customers*' is popular in business analysis and has been suggested for educational analysis (Schmidt, 2002: p.37) and Eagle and Brennan (2007) suggested a "middle way" concept for benefits of the both educational policy-makers and managers.

However, it is not the main objective of this paper to discuss further on this issue. The focus of this study is the selection of a higher learning institute by the students. Education and education marketing is a service industry and this presents a particular set of challenges for practitioners (Ross, Heaney and Cooper, 2007) and in the service industry the main focus is the students-cum-customers. Selecting a higher learning institution is the first step the international students undertake in educational process of a higher education. Furthermore, selecting a higher learning institution is a momentous decision that may shape not only the life and success of students' careers but their families as well. In the choice criteria review, the student-cum-customer must decide which higher learning institutes to attend while undergoing various amounts of influence by mass media, parents, peers, location, cost, and other variables. These phenomena have encouraged HEIs to place greater emphasis on student recruitment. Due to the importance associated with the choice criteria and how to influence the potential student's decision-making process, various initiatives have been instigated. In Malaysia recently, international students are considered as a new group of students who go to higher learning institutions in order to enroll in higher education studies outside their own country. Thus, a considerable segment of customers of higher learning institutions are currently demanding a kind of education that may be different from the local Malaysian students. In the new environment, HEIs especially private HEIs must identify these "new" customers and determine their needs in order to be able to adapt and serve them. This strategy is considered important as a survival for the private HEIs and to achieve the satisfaction of the students and lastly toward the loyalty to the HEIs in this competitive environment. All HEIs in Malaysia realized that the international students recruitment is of paramount importance for them as a means of generating income for financial able.

This paper aims to examine the behaviors of international students and first-time university attendees in selecting a higher education institution and the relative reliability and credibility placed on them by international students in Malaysia. On the other hand, this paper tries to answering a very simple question: what are the factors that influence international students choose Malaysia as the destination of their study? The paper is organized as follows:

First, an overview of higher education industries in Malaysia and all over the world is discussed. Next, the study's methodology and results are presented. The paper concludes with a discussion of conclusions, study limitations and future research directions.

Reviews

Higher education is of obvious importance in supporting national economic objectives for every country in the world and the development of the indigenous labour forces, including the direct raising of extra-national income (Yorke, 1999). In the US, education is the second largest export market behind agriculture and the second largest domestic industry behind health care (Abeless, 2001). According to Pimpa (2003), it has been estimated that more than 1.6 million students study outside of their home countries and the number keeps increasing from time to time. Currently, US is the leader in the markets for international education, followed by UK and Australia (Binsardi and Ekwulugo, 2003). In terms of investment, countries such as EU, Australia, Canada, the USA and Korea invest, respectively, 1.1, 1.5, 2.5, and 2.7 per cent of their GDP on higher education (Cornuel, 2007). In Malaysia, besides the government-funded HEIs, there are quite a number of HEIs from subsidiaries of major conglomerates and some of these HEIs are listed in the Kuala Lumpur Stock Exchange (KLSE has now been renamed as Bursa Kuala Lumpur), as their roles are understandably entrepreneurial in nature. The government of Malaysia plays a major role and acts as a mediator to Private HEIs. However, according to Mazzarol et al. (2003), the major obstacle to the expansion of brand campuses in Malaysia is likely to be potential squabbling or rivalry between various influential stakeholders seeking to encourage the development of their own alliance partners. Meanwhile, a majority of these private HEIs will need a substantial period of time to fully develop and become financially able.

According to Tan (2002), there are four national goals to be realized in the restructuring of private HEIs:

1. to produce the necessary human resources for the country
2. to export higher education
3. to stem the flow of higher education students offshore in order to reduce the outflow of Malaysian currency
4. to enroll 40% of student-age cohort in higher education by the year 2020 in order to realize the aim to make Malaysia a developed, industrialized country.

By the mid-1990s, there were two major types of private HEIs in Malaysia, the single-discipline colleges and the comprehensive course-delivery colleges. The majority of the private HEIs were developing into the latter category, engaging comprehensive course-delivery (Noran and Ahmad, 1997). Most private HEIs in Malaysia are located in the Klang Valley in the state of Selangor which is one of the developed states in Peninsular Malaysia. To date, there are 16 private universities and college universities and 4 brand campuses of reputable foreign universities from Australia and United Kingdom. Table 1 shows the list of the private universities, college universities and foreign brand universities in Malaysia.

The policy of liberalization and democratization of education introduced by the Malaysian government, has caused the increase of international students in Malaysia since 1996, after the government had introduced the Higher Education Act. It is proven that the number of international students enrolment in Malaysia has increased rapidly from 32 in 1970 to 126 005 in 1999 (Mohamad, Zahiruddin and Mohd, 2003). In 2004 only, there were about 39 763 international students enrolled in Malaysian private HEIs (Habhanjan, 2004). Our research (Table 2) indicates the number of international students enrolment in Malaysia from 1996 to 2005. Why do international students feel attracted to study in Malaysia? Currently, majority about overseas study decision making is based on researches done outside Malaysia. Maringe and Carter (2007) said that most of the studies suggested student overseas decision making is modeled by a combination of pull-push factors. According to Mazzarol and Soutar (2002) there are many factors influencing students to choose international education, such as lack of access to higher education especially in Asia and Africa, a commonality of languages and availability of technology-based

programs. For countries such as Australia, France, the UK and USA, quality management in education is a major focus of attention (Baldwin, 1991; Marceau, 1993; Harman, 1994; Lindsay, 1994 and Edmond, 1995). In another study done by Mazzarol and Hosie (1996), it was found that many of the students had been recruited for study in Australia by an education agent and friends are the most commonly cited source of information about HEIs. While in Malaysia, the quality management system philosophy is applied in order to encourage students to pursue studies within the country (Sohail, Rajadurai and Nor, 2003). The findings from the studies mentioned above, have important implications for strategic international student marketing, recruitment and retention and can be used as a basis of this study.

Table 1 :

List of private universities, college universities and foreign brand universities in Malaysia

Names	Country (year of establishment)
International Medical University	Malaysia (1999)
International University College of Technology Twintech	Malaysia (2003)
University College of Technology and Management Malaysia	Malaysia (2001)
Kuala Lumpur Infrastructure University College	Malaysia (2003)
Limkokwing University College of Creative Technology	Malaysia (2003)
Multimedia University	Malaysia (1999)
Kuala Lumpur University	Malaysia (2001)
University of Technology Petronas	Malaysia (1999)
Universiti Tenaga Nasional	Malaysia (1999)
Universiti Tun Razak	Malaysia (1999)
University College Sedaya International	Malaysia (2003)
University Tun Abdul Rahman	Malaysia (2001)
Selangor Industry University	Malaysia (2000)
Malaysia Open University	Malaysia (2000)
Malaysia Science and Technology University	Malaysia (2000)
Asia Institute of Medical, Science and Technology	Malaysia (2001)
Monash University	Australia (1998)
Curtin University of Technology	Australia (1999)
University of Nottingham	United Kingdom (2000)
FTMS-De Monfort University	United Kingdom (1999)

As competition increases in the education industry, many HEIs increasingly view students as consumers. On the other hand, HEIs are forced to equip themselves with the necessary marketing intelligence and information that would enable them to face the challenge, especially in the international markets. On the students' side, they have a "membership" relationship with the education service (Lovelock, 1983). Students considered themselves to be the main decision-makers. In other words, foreign students are more demanding for better value of their money and are more selective in choosing an educational institution. Therefore, criteria of the choices of study destinations have been widely researched and researchers have come out with different results. As a result, the main work regarding choices of criteria within the HEIs' environment, likewise shows the multi-dimensional nature of this concept. Thus, the main studies performed within HEIs show the dimensions presented in Table 3. A significant number of studies are available especially in the context of home students and international students in the most developed world. On the other hand, the variety of variables shown in Table 3 creates difficulties

when attempting to develop an ideal concept for this study. Table 3 shows the summary of some recent studies on choices of criteria of study destinations from different sample of students.

From the observation done in the Table 3, among potential determinant dimensions of choices of criteria are aspects such as *accommodation, library, laboratory, cafeterias, student union building*. These aspects could be encompassed with *facilities or infrastructure dimensions*. Academic staff elements such as *teaching quality, staff qualification, teaching quality, medium of instruction, reputation, and image* appear as potential dimensions in teaching and learning quality. HEIs with large faculty and facilities may attract more students (Tang, Tang and Tang, 2004). *Cost factor* is also highlighted, which would include *tuition fees, costs of living, prices of services*, etc. As prices for tuition rise, enrollment rates tend to fall (Leisie and Brinkman, 1987). The four grouping refers to the environment surrounding the students such as *campus life, safety, campus design, social life and people surrounding the HEIs compounds*. Support services such as medical, international schools, part-time job, children kindergarten, bank, counseling, financial support, career guidance also were highlighted by the researchers. A decision-making process by the potential student is often influenced by “significant others” such as friends, parents, counselors, other students, teachers and university admission officers, internet, mass media and sometime the league tables. Employers, parents and stakeholders in general are now far more aware of instructional ratings (Veloutsou, Paton and Lewis, 2005). Majority of these dimensions, which are normally controlled by the HEIs, could be considered as important choice criteria by the international students. On the other hand, a systematic review of literature was done by Hemsley-Brown and Oplatka (2006), on higher education marketing and they divided researches in this area into 11, such as marketing communication, image and reputation, application of marketing models, transactional marketing, relationship marketing, strategic approaches in marketing, extending participation in HEIs, strategic tools of marketing, market segmentation, market positioning, and market planning.

Table 2: International Students’ Enrolment in Malaysia, 1999-2005

Years	Numbers
1996	12, 072
1997	12,170
1998	13,356
1999	12,605
2002	28,022
2003	31,288
2004	32,254
2005	22,635

However, *gender* and *age* are the two most studied areas regarding demographic factors bearing on the international students’ adaptation (Sam, 2000). The current international students have been raised with the ideal of gender equality not only in the public arenas of education and employment but also in their home by their parents. In a study about student satisfaction in HEIs, Aldemir and Gulcan (2004) found that a great majority of female students expressed satisfaction with the faculty, against male students. Similarly, it has been found that female students use more intensively the information source to collect information about their future university studies (Veloutsou, et.al, 2005) The Joseph, Yakhou and Stone (2005) study indicated, for example, that one of the overriding concerns of women is safety and they would place *campus safety* as a high priority in selecting the HEIs. Men, on the other hand, appear to place more importance on such items as *scheduling* and *sports*. However, Wang and Bu (2004) indicated that there was no significant gender difference in their beliefs regarding the relative advantages and disadvantages of domestic versus global careers. A study in Malaysia done by Sohail, Rajadural and Nor Azlin

(2003) found that the award of ISO 9002 has been a reason for enrolling in the universities by overwhelming number of female respondents.

Table 3: Summary of studies on choice of criteria of study destination

Author	Targeted population & country	Summary
1. Joseph & Joseph (1998)	Tertiary students in the North Island of New Zealand	5 factors – cost of education, degree, physical aspects, facilities & resources.
2. Leblanc and Nguyen (1999)	Random sample of 700 students from business school in Canada.	6 factors- satisfaction value, epistemic value, image, emotional value, price and quality and social value.
3. Joseph and Joseph (2000)	Random sample of 200 students from Indonesia	5 factors – course & career information, physical aspects & facilities, cost of education, degree & value of education.
4. Soutar & Turner (2002)	Western Australian school leavers (the major group who enrolled the state's tertiary institutions)	4 factors - course suitability, academic reputation, job prospects and teaching quality.
5. Mohamad, Zahiruddin & Mohd (2003)	International students who study in public & private of Malaysia institutions	4 factors – course characteristics, country characteristics, administrative processes & cost.
6. Binsardi and Ekwulugo (2003)	International students from developed and developing countries	4 factors – educational standard, university admissions, employment, social factors
6. Rohaizat (2004)	Senior and junior students in four Malaysian public universities.	5 factors- reputation of education, programmed structure, conducive facilities and resources, choice influencers and customer orientation.
7. Navarro; Iglesias and Torres (2006)	Spanish University's students from five major disciplines	5 factors – teaching methods, administration, teaching staff, enrolment and infrastructures
8. Firdaus (2006)	Students from two public universities, one private university and three private colleges in Malaysia	4 factors – non-academic aspects, academic aspects, reliability and empathy
9. Maringe (2006)	Students from schools and Colleges in the Southampton University Partnership scheme	2 key signals – employment and career prospects and programme and price
10. Maringe and Carter (2007)	African Students who choose to study abroad and UK	7 factors – recognition, international quality, safe, part time jobs, learning environments, opportunities for post-graduate, easy application process

In the study of choice criteria, the vast majority of studies dealt with only one country samples, such as US (DeShields Jr. et al, 2005), Indonesia (Joseph and Joseph, 2000), New Zealand (Joseph and Joseph, 1998), Australia (Soutar and Turner, 2002), Taiwan (Chen and Zimitat, 2006), Malaysia (Rohaizat, 2004), Thailand (Pimpa, 2003), Spain (Navarro et al, 2005) and Turkey (Yamamoto, 2006). According to Joseph and Joseph (2000), there is very little of cultural distance if samples from one country were used in the study. As Cubillo, Sanchez and Cervino (2006) point out that a growing number of international students in search of higher education out of their own country, have increased the need for understanding the behavior of these students from a cross-national perspective. Only a few studies have used international students as their samples, such as Binsardi and Ekwulugo (2003), Mohamad Hanapi et al (2003) and Mazzarol and Soutar (2002). As summarised by McMahan (1992 in Mazzarol and Soutar, 2002), a positive

correlation was found between the size of the host nation and the sending nation's economies. As mentioned above, this study can also become marketing intelligence inputs for the Malaysian Government and the HEIs in Malaysia. It is better to seek information on international students from the sending countries towards Malaysian education. Further more, written about Malaysian education is very little in international arena, yet the number of foreign students chooses Malaysia as their education destination continues to rise annually, this research becomes imperative. In the spirit of observations cited above, the researchers decided to undertake this research endeavor.

Methodology

The study reported in this article was part of a study of the choice criteria for international students, which enrolled in the private higher learning institutions in Malaysia before September 2004. This study was conducted over a period of four months at a variety of locations such as Kuala Lumpur, Shah Alam, Ipoh, Cyberjaya and Melaka. Although this study is not the pioneer study in Malaysia, it however, relies on methodologies that are highly and consistently accepted in many researches in other countries. At the beginning, the selected HEIs were sourced from the database provided by the Ministry of Higher Education in Malaysia. However, due to limited access to all private higher learning institutions and little cooperation from them, the method of sampling procedure was changed to non-probability sampling whereby the combination of judgment and preference sampling was used with the help of the associations representing Malaysia's HEIs such as NAPIEI (National Association of Private and Independent Educational Institutions) and PKIBM (National Association of Indigenous Private Educational Institutions). The samples of this study involve a number of international students from various countries who are studying in Malaysian private higher educational institutions. Complete sets of questionnaires were distributed to selected samples of six Malaysian Private Higher Educational Institutions. The institutions were chosen based on the number of enrolments of international students. However, only 656 foreign students responded to the questionnaires, which had been sent to six private higher learning institutions. These were considered satisfactory for statistical analysis and representative of population strata. In addition to information supplied in the questionnaires, numerous opinions, personal experiences, views and recommendations with regard to the future development of private higher institutions and government policies were also received from these international students.

The instrument used in this research is questionnaire. The preliminary step in instrument design involving a series of focus groups consist of educational providers and overseas students attending colleges and universities in Malaysia, to assess the appropriateness of the choice criteria found in Malaysia.

The questionnaire is designed based on preliminary works data, focus group meeting, and by instrument adopted from numerous of studies such as Soutar & Turner (2002), Joseph and Joseph (1998 and 2000), and Leblanc and Nguyen (1999). Three criteria were applied in developing the questionnaire, which included (1) test administration between 10 to 15 minutes, (2) eliminations of variables with apparent low predictive value and (3) a questionnaire easily understood by the students. After the pre-test activity, a final 48 variables item questions were ready to use. The questionnaire is divided into two parts. The first section of the questionnaire asked respondents to rank the different dimensions on a scale of (1) Extremely not important; (2) Very not important; (3) Not important; (4) Important; (5) Very important; and (6) Extremely important. In the second part, the respondents were asked about their profile or background such as country origin, age, gender and types of studies.

Data Analysis

656 responses were received and validated for further analysis. The data obtained via the questionnaires were analyzed using the SPSS statistical program. The analyzed sample comprises mainly men (65.5 per cent). Majority of the samples (94 per cent) comprises students who are below 25 years of age. The students from the South-east Asia make up the largest population of the samples (32 per cent) and the least are from North America, Europe and Oceania (2 per cent). With regard to their program enrollment, 376 of the students were enrolled in degree programs (56.4 per cent) and only 6.4 per cent of them were enrolled in post-graduate programs. The rest of the respondents were enrolled in pre-diploma and diploma levels.

As explained in the methodology, the international students were invited to indicate their levels of agreement or disagreement with statements regarding the variables mentioned in the questionnaires. Their responses are presented in Table 4. Table 4 shows the most important and the least important items. The summary of means in Table 4 shows that from the 48 variables, the students place a great deal of importance on all the items. A mean score was calculated for each aggregate score. Rankings were determined by means of summary statistics. Most of the items have a mean score range of 4 to 3 except one item which is *outskirts* with a mean of 2.93. It is indicated from the 10 most important items, *entry qualification*, *English usage* and *English language* were the most important criteria of choice whereas the item *outskirts* is the least important criteria of choice chosen by the international students.

Table 4 : Summary of means

The most important items	Importance	The least important items	Importance
1. Entry qualification	4.98	1. Education expo	4.20
2. English usage	4.94	2. Exchange rate	4.19
3. English language	4.94	3. Sport recreation	4.17
4. Specialized field	4.83	4. Internet	4.11
5. Academic staff	4.83	5. Friends	4.04
6. Clean facilities	4.81	6. Printed media	4.00
7. Carrier advisor	4.81	7. Electronic media	3.99
8. Visa	4.72	8. Beautiful	3.81
9. Religion	4.71	9. Relatives	3.75
10. Internet facilities	4.68	10. Outskirts	2.93

After determining the mean analysis, a factor analysis was performed. Factor analysis is a data reduction technique that can help determine a smaller number of underlying dimensions of a large set of inter-correlated variables (Absher and Crawford, 1996). Factor analysis was used to assess the nomological validity of the choice criteria, while discriminant validity of the choice criteria was examined through the rotated factors scores across all of the identified factors (Joseph and Joseph, 2000).

Table 5 reveals the factor loadings identified by each of the samples from international students involved in this study. Factor analysis with varimax rotation was used to determine the underlying dimensions of 48 criteria of choices. This analytic technique is very common and found to be used in about one in six journal articles over a three-decade review (Aron and Aron, 1994). According to Gilbert, et.al (2004: 376), although no one method of factor analysis is universally endorsed as the preferred one, different approaches are used based on particular situations. All factors with eigenvalues or latent roots of 1.0 or greater are considered significant and reported. Items were removed if factor loadings were less than of 0.40 (Hair et al. 1998). However, in this study, only items with factor loadings of 0.5 and above are taken (based on previous studies) and

suggestions made by Nunnally (1978) and Gilbert et.al (2004) were followed. For the purpose of interpretation, each factor comprises of variables are loaded 0.50 or higher on the factor. Furthermore, alpha was used to identify the reliability of identified factors. The scale for reliabilities were determined by the non-standardized Cronbach alpha which is reported to be the preferred method (Morgan and Greigo, 1998) and is the most widely used for reliability's scale (Aron and Aron, 1994).

The naming of a factor-loading matrix is a highly arbitrary decision of the researcher (Aron and Aron, 1994). In this study, the interpretation of the factor-loading matrix was straightforward. The seven factors are *quality learning environment*, *decision influencers*, *customer focus*, and *cost of education*, *facilities*, *location* and *sosialization*. The first of these components that explains 36.7 per cent of the variance reflects quality of the program. The second explains about 7 per cent of the variance and includes aspects related to words of mouth. The aspects pertaining to the customer orientations are included in the third component. This component explains about 4 per cent of the variance. The forth component explains 3 per cent and groups together the items related to cost of education such as *tuition fee*, *accommodation fee*, *exchange rate* and *availability of the funding*. The fifth component, *facilities*, groups together the items related to the *internet/computer facilities*, *sport facilities*, *design of the building and campus* and *clean and tiny environment*, which also explain 3 per cent of the variance. The last component is *socialization*, which includes *the university location at urban area* and *availability of part-time job*. All seven factors explain 57 per cent of the total variance. Thus, a model with seven factors may be adequate to represent the data because the results of the analysis can be considered satisfactory since they do not exceed 60 per cent of the explained variance recommended in social sciences (Hair, et al., 1998).

After determining the factor structure, a reliability test of the detected underlying scales was performed. The results showed reliabilities of between 0.91 and 0.52 for the six factors, which are considered sufficient (Nunnally, 1978) except for the last factor. The alpha coefficients for the factors show that the majority are highly reliable and acceptable, with alpha scores exceeding 0.5, the threshold recommended by Nunnally (1978) for exploratory research. The results for the factor analysis also show that the Kaiser-Meyer-Olkin (KMO) score is 0.756 and the Bartlett's Test of Sphericity value was significant (Chi square = 5675.15, $p < 0.05$). This KMO value shows that the sampling was adequate and therefore acceptable, and the distribution of value is adequate for conducting factor analysis.

Besides analyzing the factor analysis on each of the item, it is also important to rank the factors according to their importance as selected by the international students. The respondents were asked to rank the different dimensions in order of importance. The results of importance of dimensions could also be used to support and prove the factor analysis results. The factors have been ranked according to their percentage. The rank order as shown in Table 6 reveals that 66.4 percent of *learning environment & political* is the most important factor chosen by the international students followed by *choice of influence* (54 percent), *concern for students* (48 percent), *cost of education* (24 percent), *facilities* (24 percent), *location* (12 percent) and *general* (12 percent). If we revised the factor analysis results, we could see that the results from both factor analysis and importance of dimensions were similar. It concludes, indirectly, that the results of importance of dimensions were indeed supporting the results of factor analysis.

Table 5 : Factor analysis of foreign students' choice of criteria of study destination

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Quality Learning environment							
Qualification	0.692						
Staff	0.691						
English usage	0.684						
University reputation	0.657						
Courses offered	0.624						
Course duration	0.618						
Specialized field	0.611						
Visa	0.610						
Political stability	0.601						
Entry requirement	0.560						
G2G collaboration	0.555						
Decision influencers							
Relatives		0.721					
Printed media		0.709					
Electronic media		0.708					
Education expo		0.681					
Internet		0.679					
Friends		0.660					
Education agent		0.620					
Parents		0.598					
Responsiveness of university		0.505					
Customer focus							
Regulations			0.659				
Community accepted			0.643				
Culture			0.620				
Campus life			0.615				
Religion			0.590				
Carrier advisor			0.587				
International students' advisor			0.539				
English language			0.525				
Cost of education							
Cost				0.716			
Funding				0.844			
Exchange rate				0.565			
Accommodation				0.538			
Facilities							
Design/layout					0.730		
Clean					0.630		
Sport recreation					0.516		
Internet facilities					0.512		
Socialization							
Urban area						0.652	
Part-time jobs						0.510	
Location							
Outskirts							0.625
Beautiful							0.556
Eigenvalue	17.637	3.021	2.118	1.315	1.239	1.115	1.083
Cumulative of variance explained	36.744	43.037	47.450	50.190	52.771	55.093	57.093
Cronbach's alpha	0.9132	0.9014	0.8696	0.7350	0.7805	0.5204	0.3006

Table 6 : Importance of dimensions

Rank	Factor	Percentage
1	Quality Learning environment	66%
2	Decision Influencer	54%
3	Customer focus	48%
4	Cost of education	24%
5	Facilities	24%
6	Socialization	12%
7	Location	12%

As indicated in Table 7, significant differences were noted between how males and females responded. Female respondents attach a higher perceived importance to six of the seven factors mentioned in Table 7. The comparison of means between male and female students does not reveal any significant differences except for two items: *decision influencers* and *facilities*. This shows that females place more importance on these items than their male counterparts. However, there is no clear explanation as to why female students evaluated the HEIs differently on the factors listed above.

Table 7 : Comparison of means between Male and Female

Factors	Male n =430	Female n = 231	p-value
Quality Learning environment	4.66	4.69	0.472
Decision influencers	4.12	4.16	0.002*
Customer focus	4.52	4.61	0.351
Cost of education	4.35	4.40	0.159
Facilities	4.46	4.51	0.001*
Socialization	4.32	4.42	0.521
Location	3.42	3.27	0.125

Note: * Significant level at 0.01

Furthermore, to evaluate the important of decision-making process on choice criteria, a multiple analysis of variance (MANOVA) technique was applied. According to Sunita et al (2006), the main advantage of this technique is protection against type 1 error and ability to reveal differences not shown in separate analysis of variance (ANOVA). On the other hand, Malhotra (1999) states that MANOVA examines group differences across multiple dependent variables simultaneously. According to Tabachnick and Fidel (1996), this technique also provides the ability to accommodate the within subjects design of this research, something not provided for in discriminant analysis, a mathematically similar technique. Table 8 shows the results of the relationship of the seven factors and students from the sending nations (grouped by region) by using the MANOVA test. The results indicate that students from African nations have a strong relationship with factor 1, 3, 5 and 7. Meanwhile factor 3 appears to be the most important factors

for all the nations. These results suggest two findings: first, different students from different nations require different needs and wants, and secondly, international students hoping that they will be considered as customers because they are paying directly for a higher proportion of the overall cost of their studies as mentioned by Eagle and Brennan (2007).

Table 8: Differences in factors of choice criteria in Regions

Factors	Africa	The rest of Asia	Middle East	Southeast Asia
Quality Learning environment	3.44**	3.26	3.40**	3.22
Decision influencers	3.03	2.81	3.21*	2.76
Customer focus	3.20**	3.12*	3.23**	3.22*
Cost of education	3.10	2.91	2.93	3.32*
Facilities	3.29*	3.21*	2.95	3.02
Socialization	3.20	3.05	3.21	3.33*
Location	3.32*	2.98	3.11	3.07
F	2.985	2.275	2.762	2.221
p-value	0.085	0.132	0.097	0.137

Note: ** Significant level at 0.01, * Significant level at 0.05

Conclusions

It is important to recognize the needs of the students on meeting their expectations. To achieve the nation's goal to become the regional education hub, the higher educational institutions especially the private institutions must identify what is the choice of criteria most preferred to international students. Therefore, it requires the ability of the institutions to market and promote these various choices of criteria in order to attract them. This research highlighted several aspects relating to student's criteria of choice of study destination. Through this study the researcher determines that five items such as *qualification, English usage, English language specialized field and staff* were considered important by the international students. The findings also highlighted differences between males and females. Samples indicate that females place more importance in information provided by people around them and on facilities provided by the HEIs than their male counterparts. Samples also indicate that different nations and regions see Malaysia in a different perspective in terms of providing education for their citizens. Apparently, if Malaysian private educational institutions want to develop strategies to attract foreign students, they should know the students' needs and wants and develop strategies to satisfy those needs. The failure to react will result in losing sustainable competitive advantage, both in local markets and the overseas market.

By identifying the aspects of choice criteria, the HEIs could attract potential international students by providing the items mentioned above - through effective marketing strategies by internal or external marketing activities. It makes sense to adapt a marketing policy to suit the specific requirements and culture of prospective students in these countries. As we mentioned above, selecting a higher education institution to study or attend is a momentous decision that may shape the life and success of a student's career and his/her family. According to Joseph and Joseph (1998), the items selected by the international students should be a concern by the HEIs

for market positioning strategy and to strengthen their offerings in these areas. As mentioned in the findings, the items that are most related to pure services such as *quality education, cost, and facilities provided by the HEIs* are the key aspects that determine the decision-making process by the international students and also will determine their satisfaction and consequently will become the words-of-mouth elements for the potential and new students. The items mentioned above are aspects directly controllable by the HEIs as empirically verified in this study. If the HEIs have ability to help minimize dissatisfaction and increase retention of students is an important marketing strategy to the HEIs. On the students' side, they are facing stiff competition for admission to their own nations' best HEIs. There are limited spots for undergraduate students in HEIs in their countries because the demand is very high. Studying in foreign countries and foreign HEIs is one of the alternatives. Lastly, students and their parents have to find the good fit between HEIs and the students so that they will ensure the completion of the university degrees.

Finally, the study has accomplished a basic task in that we are better informed as to which choice criteria students prefer and perceive to be reliable to consider. In spite of the importance of the results obtained, it is also important to highlight some of the limitations of the study, which further research will endeavour to remedy. The samples are limited to international students at the selected private universities in Malaysia. This could limit the generalization of the research findings. Further research could use a larger range of students with a more diversified background. Consequently, in future studies, the choice criteria of selecting HEIs should be analyzed from the perspective of the various stakeholder groups such as parents, secondary school students, and employers who interact with the HEIs. In the writers' opinions, it would be necessary to corroborate the results obtained in this study and other studies and expand the results to other elements that make up the current offers by the HEIs all over the world. Another interesting area would be a comparative analysis between purchase intention for prospective students at the particular regions and purchase decision by the international students.

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