

Globalization and the Factors Influencing Households' Demand for Higher Education in Malaysia

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Abstract— In the era of globalization, competitive pressure has forced the higher education sector to look for more competitive marketing strategies. Therefore, it is essential that higher learning institutions understand the needs and expectations of parents because they are the decision influencers for their children education. The purpose of the research was to examine the expectations on higher education institutions among households, and to identify the important criteria's influencing their preferences in selecting higher education institutions. It is based on personal interview with 4000 households from Peninsular Malaysia. The results shown that five factors have a strong influence on households' decision making process, namely, financial aid, safety of the campus, academic reputation, university image and accommodation. Further, through principal component factor analysis, three dimensions were revealed in explaining the decision criteria's of Malaysian households, i.e., (1) personal factors, (2) socialization and (3) campus, program and cost.

Keywords—Factor Analysis, Globalization, Higher Education Institution, Households.

I. INTRODUCTION

Higher education is essential for any country to achieve sustainable growth and global development. It is also important for the enhancement of society participation in social mobility, public life, achievement of harmony, justice and comprehensive peace at both internal and international levels. In addition, the growing importance of knowledge in the world today and the ever greater numbers of people being trained at the higher level has increased higher education's responsibility. [1] added that the economic development depends on education and training of labor force, from this sense, the level structure of higher education affects the economic development. Besides, publication principles higher education is of obvious significance in supporting national economic and social objectives of every county in the world and for the development of the indigenous labor forces,

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including the rise of national income, poverty eradication and equity income distribution.

Globalization has required institutions of higher education to undergo revolutionary changes to ensure human capital are "produced" not for a product-based economy, but for a knowledge-based economy. Higher education is professional, productive, and can be consumed and operated. The higher education sector is a talent production sector; it can change simple and general labor into complexity and particular workforce [1]. [2] mentioned that there has been an increasing globalization in the sector of higher education for the past couple of decades. The globalization of higher education can be seen from the large flow of student studying abroad and the increasing number of colleges and universities providing educational services across borders.

Malaysia was one of the traditional suppliers of international students studying overseas. Nevertheless, the rising cost of education, the rising demand for higher education in the region, and the proliferation of private colleges provided Malaysia the opportunity to transform its higher education sector to be a regional center of education excellence. This transformation allowed the country to develop its higher education sector to be a global export industry [3]. The rapid expansion of Malaysian higher education has involved extensive growth that has also relied mainly on the liberalization of the education sector. According to [4] the increase in the demand for post-compulsory education recorded in the second half of the twentieth century has been phenomenal. The number of students pursuing higher education rose substantially in both developed and developing countries.

One vital exercise which we are usually involved in our life is the decision making. [6] argued that education decision making in terms of selection of universities is one of such exercises that confronts the average candidate, this is dictated by one consideration or another. These consideration can be quite complex, particularly, where there is a large number of universities to choose from. With the nation's focus on the higher education sector, there are 89 public higher education institutions and 460 private educations institutions. The issue of higher education institutions choice criteria has been widely researched in Malaysia [7], [8], [9], [10] etc. Most of the responses from the previous studies were gathered from prospective students, parents of prospective students and first year university students. However, there are limited researches on factors influencing household's choice for higher education institutions. Therefore, this study contributes to the literature

by providing a general view of factors influencing household's preferences in selecting higher education institutions for their children. This study also aims to identify the factors influencing households' demand for higher education institution before 1995 and after 1995. The outcome of this research could be beneficial to both parent and institutions to obtain planning and decision making in the future.

II. THEORETICAL FRAMEWORK

Numerous theoretical models have been suggested to explain the nature factors that influence student's intention to further their study at higher education institution. Each of these theoretical models describes the various processes by which a school student selects a high education institution. According to [11], there are three theoretical or choice models of higher education institution attempt to describe the factors that influence a student's choice of a specific institution of higher education include the following:

1. economic models;
2. sociological models; and
3. combined models.

Economic models of human capital investment emphasize rational decision-making behaviour when examining students' college choice. Individuals are assumed to act rationally in ways that maximize their utility, given their personal preferences. Students choose a college based on the level of value that each institution offers by comparing costs with perceived benefits. The underlying assumption of the economic models is that students will select a particular institution if the benefits of attending the institution are greater than the perceived benefits of enrolling in other institutions. An important contribution of the human capital investment approach is its focus on the effects of pecuniary factors (e.g., family income, tuition, and financial aid) on enrolment. Although the human capital investment model shows the effects of variables like income and ability on college-related decisions, it has limited usefulness in explaining sources of differences in college choices across groups. The human capital investment model assumes that, even when the expected benefits and costs are the same, two individuals may make different college choices.

[12] mentioned that the theory that investment in human capital provide returns though time, despite of the increase in the cost at the time the investment being made, has given the hope to developing nations such as Malaysia to emphasize education for the purpose of developing citizens.

Sociological models differ from economic models. Economic models assume that students rationally decide which higher education institution offers the highest value, whereas sociological models describe a process that considers decision determinants developed throughout a student's life. Sociological approaches to college choice typically emphasize the ways in which socio-economic characteristics influence students' on offers by comparing costs with perceived benefits. According to sociological approaches, student behavioural variables (e.g., academic performance) interact with background variables (e.g., parent social status) to determine students' educational aspirations [11]. Sociological models were developed from educational and status attainment

research, focusing on the aspirations of individuals desiring to pursue in a higher education institution. The sociological model specifies a variety of social and individual factors leading to a student's occupational and educational aspirations [13]. Sociological approaches are useful for understanding the ways in which structural constraints and opportunities shape an individual's perspective about and orientation towards college choice. Sociological approaches are also useful for exploring differences across groups in college choice [11].

Combined models utilize the most powerful indicators in the decision-making process from the economic and social models, providing a conceptual framework that predicts the effects of policy-making interventions [14]. Combined models include the most important indicators from economic and sociological models in the decision-making process [15], [16]. These kinds of models allow a considerable amount of analytical power, as they combine sociological perspectives with rational decision making.

III. LITERATURE REVIEW

Education is one of the fundamental components that generate solutions to economic problems. Well educated and skilled people are the key elements for creating, sharing, disseminating and using knowledge effectively. A good economy requires a smart education system which is flexible and promotes creative, critical thinking, innovation [17]. [18] suggested that overall perceived quality of higher education is thought to have considerable impact on the decision making process to attend higher education institutions.

Competitive pressure has forced the higher educational institutions to look for more competitive marketing strategies in order to compete for students in their respective markets. The higher education in Malaysia has gone through substantial changes in order to provide quality education to the nation. Furthermore, the increased of public demand for tertiary education in both local and private institutions, and the government's aspiration to position Malaysia as a regional centre of academic excellence have led to the growth of private higher educational institutions. According to [5], higher education in Malaysia has experienced an increasing competition among universities and higher education institutions to attract students both locally and internationally.

It appears that the issue of higher education institutions choice criteria has been widely researched. The basic idea is that consumers (student and parent) will choose a higher education institution that matches their selection criteria academically, financially and socially. A study conducted in Malaysia by [19] found that student's preference of a university was mainly determined by five factors: value and reputation of education, programme structure, facilities and resources, choice influencers and customer orientation. Based on the preliminary study of final year management students, he argued that these selection factors should guide university administrators in developing the preferred image of their universities.

According to [20], the globalization of the economy and society has had its impact on and has been influenced by research and education. In the case of Malaysia, the policy of liberalization and democratization of education sees a sudden

upsurge of foreign students studying in Malaysia as from 1996 when the government introduced the Higher Education Act. They developed a model for foreign student demand for Malaysian higher education and noticed that course attributes country characteristic, cost and administrative ease are significant factors in determining the decisions to pursue post-secondary education in Malaysia. To further progress and succeed as a centre for education excellence, Malaysia needs to internationalize its education systems. They also concluded that Malaysia needs to streamline its strategy for internationalization by greater improvement on the course, quality of student services such as accommodation and recreation facilities, and the others relating to the teaching resources, in particular well-qualified lectures and capable administrators, is immediately needed. Apart from that, Malaysia also needs to contain its costs in order to allow the programmes to enjoy cost competitiveness.

Evaluation criteria are the various dimensions, features or benefits of the institutions that the potential students will evaluate in selecting their choice of institution. The choice evaluation criteria that customers will use are driven by some underlying factors. [21] examined the selection criteria by international students of their higher education at private higher learning institutions in Malaysia. They mentioned that as competition increases in the higher education industry, many higher education institutions especially private higher education institutions increasingly view students as consumers. Therefore, private higher education institutions are forced to equip themselves with the necessary marketing intelligence information that would enable them to face challenges, especially in the international markets. They highlighted that the most four important factors; qualification of the teaching staff, English usage, English language specialized field and top-notch staff were considered importantly by international students selection criteria. By identifying the aspects of choice criteria, the private higher education institutions can attract potential international students by delivering the essential criteria required through effective marketing strategies.

Several other studies have identified and suggested several factors or determinants. [22] and [23] discussed that empirical results has shown that location of higher education was an important factor on higher education institution choice decision. Some students may be looking for higher education institutions close to their hometown or place of work due to the factors of convenience and accessibility. [22] also concluded that the proximity to a college campus does affect college attendances rates. Students who live close to campus are more likely to attend college though they may not attend the campus located near home.

Availability of the required academic programmes such as range of programs study, flexibility of degree program, major change flexibility, range of degree options and academic recognition (external influence) are the most important determinants for students to choose higher education institutions [24]. [25] found that the availability of the required programme was chosen as the top most important by the three group's respondent (prospective students, parents of prospective students and first year university students). Based on this, they concluded that the respondents were well-

informed about their institutions of choice and had already made up their minds about the programme they wanted to apply for or be admitted into.

Institutional image and reputation has a tremendous effect on education institutions choice. It is a powerful influence on potential student and college reputation is extremely persuasive in the college search and selection process [10]. Most of the studies found that student value on the reputation of the institutions was one of the significant predictor that influences higher education institution choice decision [26], [27].

Besides, [23] observed that an educational facility is important in a student's selection of a college or university. However, surprisingly [25] noted that the infrastructural facilities of the higher education institutions were placed among the 'least expected' by the respondents. In fact the first year students in this sample considered it the least important of all. It seems that the word infrastructure might not have been properly understood by the respondents because it actually includes very important items like the library, computer laboratories, software, classroom equipment etc. The authors had thought that this attribute would have been considered among 'very important attributes' but it seemed to be otherwise.

Cost of education is increasing as years go by, majority of the empirical results concluded that cost-related issues are one of the most important elements that influences higher education institution choice [15], [16]. Consequently, availability of financial aid becomes one of the important factors attributes expected from a particular higher education institution of choice [28], [29], [23]. It was reviewed by [30] that financial aids offered by university as one of the five very important attributes expected from a particular higher education institution of choice. Thus, students who receive financial assistance awards are more likely to enter higher education institutions

The final output for the students is the employment opportunities. Customers (students and parent) of the higher education institutions are often interested in outcomes and make college choices based on existing job opportunities [31]. Most of the literature review indicates that the key motivation that drives consumers to choose a particular higher education institution is their desire to have quality education. Quality education here means that students can excel in their studies and obtain good results because of the availability of reputable academics to provide good teaching. The importance of this factor is to allow these students to be able to obtain good employment prospect after completion of the studies [32].

IV. HIGHER EDUCATION INSTITUTIONS IN MALAYSIA

In most countries, tertiary education industry has experienced a number of substantial changes. Higher education institutions are widespread and well established as global phenomenon, especially in major English-speaking nations such as the United States (US), United Kingdom (UK), Australia, Canada and New Zealand [33], [21]. The establishment of University Malaya in 1961 is a stand point of the development in higher education in Malaysia. Until now,

the growth of higher education institutions (HEIs) has seen an important changes, which has been categorized as public HEIs, private HEIs, polytechnics, community colleges and institutions or centers for skill development [34], [35].

The Economic Transformation Programme (ETP) has been introduced by Malaysia Prime Minister recently as the comprehensive effort that will transform Malaysia into high income nation by 2020. On the other hand, emphasis on the development of human capital is the main core in achieving the National Mission [36]. Consequently, it is important to improve education system and service in order to reach and support a knowledge based economy. The remarkable growth of the institutions and student enrolment after the year 2000, has urged the government to restructure the division of Ministry of Education into two – Ministry of Education (MOE) and Ministry of Higher Education (MOHE). The MOE responsible for primary and secondary education while MOHE is responsible for policy and administration of institutions of Higher Learning (IHL). [37].

MOHE was created on 27 March 2004 to take charge of higher education in Malaysia which involves more than 900,000 students pursuing higher education in 20 public universities, 33 private universities and university colleges, 4 foreign university branch campuses, 22 polytechnics, 37 community colleges and about 500 private colleges. The MOHE's mission is to create a higher education environment that will foster the development of academic and institutional excellence. It is in line with the vision of the government to make Malaysia a centre of educational excellence and to internationalise of Malaysian education. There are also other government agencies involved in higher education under the jurisdiction of MOHE; namely the Malaysian Qualifications Agency (MQA), the National Higher Education Fund Corporation (Perbadanan Tabung Pendidikan Tinggi Nasional – PTPTN) and Yayasan Tunku Abdul Rahman (YTAR).

MOHE vision is to make Malaysia a centre of higher educational excellence by the year 2020. MOHE also responsible to build and create a higher education environment that is conducive for the development of a superior centre of knowledge and to generate individuals who are competent, innovative and of noble character to serve the needs of the nation and the world. The specific missions of MOHE are summarize as follows:

1. To create a strategic and systematic plan for higher education
2. To reinforce the management system of higher education
3. To increase the level of capacity, accessibility and participation in higher education
4. To enhance the quality of higher education at par with international standards
5. To internationalise Malaysian higher education

The MOHE concentrates on the higher education program to observe activities, quality, and administrative work as well. In 2007, MOHE established the National Higher Education Strategic Plan to fulfill the demand for knowledge-workers, which is essential in meeting the challenges of globalization.

This plan includes steps in widening access and increasing equity of higher education; improving the quality of teaching and learning in HEIs; enhancing research and innovation; strengthening of higher education institutions; intensifying internationalization; enculturation of lifelong learning; and reinforcing the delivery systems of the Ministry of Higher Education [38]. In addition, the Malaysian Qualification Framework (MQF) was introduced in 2007, to ensure the quality of higher education. This is an important step which will strengthen the quality of higher education institutions as well as in enhancing Malaysia's image as an international and regional education hub.

Globalization has caused the demand for a "world class human capital". It is essential to make sure that the institutions of higher education can provide sufficient and quality knowledge and skill needed to enable Malaysian workforce to be "world class human capital". Due to this fact it is essential to identify how globalization has affected the trend in education demand in Malaysia, especially the demand for types of institutions of higher education [12].

MOHE recognizes the evolving changes in education requirements to meet industry [37]. Malaysia has a dualistic higher education sector namely; public and private higher education institutions. Table 1 shows higher education institutions in Malaysia from 2002 to 2009. From the table, the number of public HEIs is steadily increase from 49 institutions to 72 and 89 institutions, respectively for 2002, 2005 and 2009. In contrasts, the private HEIs decreased to only 460 institutions in 2009, which is much lower than that of 2002 and 2005. The larger decrease of private HEIs is shown by non-university status institutions, which indicated only 393 institutions in 2009, while other types of privates HEIs have increased, except the private HEIs for branch campus of foreign universities. Although the privates HEIs of non-university status institutions decreased, it contributes more than 85 percent to the total amount of private HEIs in Malaysia.

By 2009, Malaysia had 89 public universities and 393 private universities. The growth in the number of public and private higher education has allowed more students to pursue higher education. As shown in Table 2, the number of students enrolls in the public HEIs is steadily increased each year from 2002 to 2009. The similar trend is also shown by the private HEIs that indicates the number of students enrolls have increased from 294 600 students in 2002 to 484 377 students in 2009, except for the 2005. The largest number of private HEIs in 2005 which is contributed most from the non-university status institutions, however indicates the smallest number of students enrolls in that year (258 825 students). In terms of student intake, the public HEIs have a larger student compared to private HEIs throughout the year from 2002 to 2009. This indicates an annual percentage of the student enroll in the public HEIs more than 55 percent to the total amount of yearly enrolment.

Table 1 Higher education institutions in Malaysia, 2002-2009

Institution	Year		
	2002	2005	2009
Public			
University	17	18	20
Polytechnic	15	20	27
Community college	17	34	42
Total	49	72	89
Private			
University	11	11	20
University college	1	11	20
Branch campus (local universities)	3	11	22
Branch campus (foreign universities)		5	5
Non-university status institutions	518	532	393
Total	537	570	460

Source: Ministry of Higher Education (2008; 2010)

Table 2 Student enrolment in higher education institutions in Malaysia, 2002-2009

Year	Public	Private	Total
2002	369 802	294600	664402
2003	383812	314344	698156
2004	393403	322891	716294
2005	415674	258825	674499
2006	450493	323787	774280
2007	507438	365800	873238
2008	547931	399987	947828
2009	566349	484377	1050726

Source: Ministry of Higher Education (2008; 2010)

For Malaysia perspective, there are four national goals to be realized in the restructuring of private higher education institutions, firstly to produce the necessary human resources for the country; secondly, to export higher education; thirdly, to stem the flow of higher education students offshore in order to reduce the outflow of Malaysian currency and finally, to enrol 40 percent of student-age cohort in higher education by the year 2020 in order to realize the aim to make Malaysia an industrialized country [3].

The background of Malaysia's education scenario can be summarized in a phrase, which is: *Malaysia is a nation, which*

believes in education as a way to achieve national unity and development. This can be seen through the changes which have occurred in the national education system since independence till now. Changes occurring in the education system are part of the continuous effort by the government to improve national unity as well as developing human capital with first class mentality – to achieve Vision 2020.

V. METHODOLOGY AND RESEARCH DESIGN

The study focuses on the chosen criteria of head of households for higher education institution. The analysis will be based on the data collected from the field survey in during the period of November 2010 to May 2011. In the context of this research, the study covers 4000 households in Peninsular Malaysia for several states who are chosen using stratified random sampling. The households were chosen based on stratified random sampling. Households are defined as head of households (males or females) who were working when the survey was conduct. Respondents were required to answer the questions by using 7-point Likert-scale.

The questionnaire is divided into two parts. The first section of the questionnaire asked respondents about their background. The data include information on heads of households, their spouses, families, education background and income. In the second part, respondents were asked to indicate their levels of importance or less importance with 19 items when selection higher education institutions. A total of 3885 respondents' data were successfully gathered with the response rate of 97 percent.

Respondents also were asked to indicate the importance of all the items (factors influencing demand for higher education institution) before 1995 and after 1995. The year 1995, has been set as the benchmark for globalization for this study as it was the year Malaysia became a member of the World Trade Organization (WTO). It is an organization which administers international trade and has 120 members. [39] indicated that countries which became members of WTO agreed upon liberalization of trade by signing up General Agreement on Tariffs and Trade (GATT). According to [39], liberalization of twelve sectors was agreed upon, including education. Even if Malaysia did not participate in the liberalization of the education sector, but by signing up GATT and through WTO, Malaysia officially became a member of an organization which promotes globalization through free trade, indicating the era of globalization for Malaysia. Therefore, 1995 is used as the "cutting off point" to measure globalization.

Table 3 shows results of the reliability test for pilot study data. The questions cover some statements to measure demand for higher education institution in the era of globalization. The Cronbach Alpha value are obtained above 0.8 for cumulatives 19 items for year 1995 and after 1995, which are considered as very good. This indicates that all constructs are appropriate in measuring factors influencing demand for higher education institution. Therefore, no modification were made on the questionnaires after the pilot test.

Table 3 Reliability tests from pilot survey

Factors influencing demand for higher education institution	Cronbach Alpha (N=30)
Before 1995 (19 constructs)	0.903
After 1995 (19 constructs)	0.970

Source : Pilot Study 2010/2011

Table 4 indicates the respondent's profiles. In terms of demography profile, expectedly, the majority of the head of the households are males (67.0 percent). Majority of the respondents are aged between 46 and 55 years old. The Malays make up the largest percentage of the sample (69.5 percent), follow by the Chinese (27.1 per cent), the Indian (2.2 percent) and other races (0.6 percent). Very small percentage of the households is aged above 56. A larger proportion of the head of the households attended secondary level of education (48.5 percent), than those attended first degree education (19.1 percent), diploma (18.7 percent) or primary level of education (12.6 percent). About one-third of the respondents, (36.9 percent) receive monthly income of RM1001-RM2500, 28.3 percents receive monthly income of RM2501-RM4000. The head of households who receive monthly income of RM8001-RM10000 and more than RM 10001 are very few with the percentage of about 2.5 percent and 2.3 percent respectively.

VI. RESULTS AND DISCUSSION

Comparing of means was carried out to establish the order of importance of criteria when household select higher education institutions in Malaysia. Table 5 lists ranking of the 19 variables that influence head of household's decision making. The summary of the means shows that the head of households placed a great deal of importance on all the 19 items. Nineteen selection items are ranked from the most important to least important. Ten items have the mean score above 6 and nine items have the mean score above 5. When making decision, head of households appear to be very concern about the financial aid, safety of the campus, academic reputation, university image and accommodation with mean values of 6.30, 6.23, 6.18, 6.16 and 6.13, respectively.

After determining the mean analysis, factor analysis was used to analyse the interrelationships among the items (higher education institutions selection criteria). 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. 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 [24]. There are basically two types of factor analysis namely, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). EFA attempts to discover the nature of constructs influencing a set of responses. CFA tests whether a specified set of constructs is influencing responses in a predicted way.

Table 4 Head of household's profiles

Variable	Frequency (N= 3885)	Percentage (%)
Sex		
Male	2612	67.0
Female	1273	32.8
Race		
Malay	2700	69.5
Chinese	1074	27.06
Indian	86	2.2
Others	25	0.6
Age		
25	107	2.8
26-35	865	22.3
36-45	1002	25.8
46-55	1297	33.4
>56	612	15.8
Education Level		
Primary	489	12.6
Secondary	1886	48.5
Diploma/STPM	728	18.7
Degree	742	19.1
Others	40	1.0
Monthly Income/Wages		
<1000	535	13.8
1001-2500	1435	36.9
2501-4000	1099	28.3
4001-6000	486	12.5
6001-8000	143	3.7
8001-10000	99	2.5
>10001	88	2.3

Source : Pilot Study 2010/2011

This study utilizes EFA to determine the ability of a predefined factor model to fit an observed data set. The Kaiser-Meyer-Olkin (KMO) criterion and Bartlett's test were used to tests whether factor analysis is appropriate for these data. KMO measures sampling adequacy and Bartlett's test of sphericity. Table 6 illustrates that for these data, KMO score is 0.953. This KMO value shows that the sample was adequate and therefore acceptable, and the distribution of value is adequate for conducting factor analysis. The Bartlett's Test of Sphericity value was highly significant (Chi square = 36893.16, $p < 0.05$), and therefore factor analysis is appropriate.

Table 5 Factors influencing choice of institution

Ranking	Institution's characteristics	Mean value
1.	Financial aid	6.30
2.	Campus safety	6.23
3.	Academic reputation	6.18
4.	University image	6.16
5.	Accommodation	6.13
6.	Academic Facilities (library, lab, etc)	6.11
7.	Industrial relation	6.07
8.	Flexible learning environment	6.05
9.	Quality of the faculty/lecturers	6.05
10.	Medium of instruction/ language usage	6.00
11.	Tuition fees	5.99
12.	Job opportunities	5.91
13.	Admission procedure	5.90
14.	Location of the university	5.86
15.	International relation	5.85
16.	Campus attractiveness	5.72
17.	Multi choice of courses	5.65
18.	Multi- culture	5.64
19.	Sport programmes	5.59

Source : Pilot Study 2010/2011

Principal component extraction was used with varimax rotation method for the factor analysis. Through this analysis, three factors major components were extracted from the 19 items. The non-standardized Cronbach alpha was used to identify the reliability of identified factor which is reported to be the preferred method and widely used. Table 7 shows that alpha coefficients or value for the three factors are highly reliable and acceptable, with alpha scores exceeding 0.5, the threshold recommended by [40] for exploratory research. All items show the factor loading ranging from 0.435 to 0.740.

In this study, the naming of a factor loading matrix was straightforward. The three factors are (1) personal factors, (2) socialization and (3) campus, program and cost. The first dimension, personal factors comprised of financial aids, academic reputation, campus safety, accommodation, quality of the faculty/lecturers, academic facilities, medium of instruction and admission procedure explains 44.74 percent of the variance. The test on internal consistency of the items in this factor shows the Cronbach's alpha score of 0.887. The second component is labelled as socialization. Loaded on to it were six items with common themes. This factor explains 4.11

Table 6: KMO and Barlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.953
Bartlett's Test of Sphericity	Approx. Chi-Square	36893.163
	Df	171
	Sig.	.000

Source : Pilot Study 2010/2011

percent of the variance and the items are international relation, multi culture, job opportunities, flexible learning environment, university image and industrial relation. The test on internal consistency of the items in this factor shows the Cronbach's alpha score of 0.871.

The last component is campus, program and cost, which include sport programmes, campus attractiveness, multi choice of courses and tuition fees which explain 3.53 percent of the variance. The test on internal consistency of the items in this factor shows the Cronbach's alpha score of 0.747. All the three factors explain 52.43 percent of the total variance. Thus, a model with three factors should be adequate and the analysis can be considered satisfactory since they do not exceed 60 percent of the explained variance recommended in social sciences [41]. Table 8 summarizes the findings about the factors influencing household' choice for higher education institution before and after 1995. There is a significant difference in the factors influencing households' choice for higher education institution before and after 1995. There is a positive trend in the demand for higher education institution with $t(3884) = -63.87$ at $p < 0.05$. It can be seen that factors influencing households' demand for higher education institution showed a positive difference at +1.30 (mean after 1995 minus mean before 1995). This indicated that the important of the factors influencing demand for higher education institution has increased after globalization.

VII. CONCLUSION

Education is the responsibility of the Government and it is committed to providing a sound education to all. The Malaysian education system encompasses education beginning from pre-school to university. Pre-tertiary education (pre-school to secondary education) is under the jurisdiction of the Ministry of Education (MOE) while tertiary or higher education is the responsibility of the Ministry of Higher Education (MOHE). The vision of the Government is to make Malaysia a centre of educational excellence.

It is well known and well documented those higher education institutions world-wide currently considerable challenges in relation to rapidly changing global conditions. A major focus of attention in current higher education is the marketing strategies. In the era of globalization, marketing strategies of higher education institutions is moving toward customer (student and parent) orientation. It is important that higher education institutions to review their marketing

Table 7 Factor analysis of higher institution choice decision factors and variables

Items	Factor loading	Variance (%)	Cumulative Variance (%)	Eigen value
Factor 1		44.740	44.740	8.971
Personal Factors ($\alpha=0.887$)				
1. Financial aids	.610			
2. Academic reputation	.653			
3. Campus safety	.608			
4. Accommodation	.621			
5. Quality of the faculty/lecturers	.595			
6. Academic Facilities (library, lab, etc)	.600			
7. Medium of instruction / language usage	.435			
8. Admission procedure	.502			
Factor 2		4.108	48.847	1.222
Socialization ($\alpha=0.871$)				
9. International relation	.740			
10. Multi- culture	.628			
11. Job opportunities	.651			
12. Flexible learning environment	.616			
13. University image	.537			
14. Industrial relation	.440			
Factor 3		3.583	52.430	1.148
Campus , Programme and Cost ($\alpha=0.747$)				
15. Sport programmes	.708			
16. Campus attractiveness	.639			
17. Location of the university	.564			
18. Multi choice of courses	.465			
19. Tuition fees	.439			

Source : Pilot Study 2010/2011

Table 8 Factor influencing household's demand for higher education institution before and after 1995

Factors influencing demand for higher education institution	N	mean	df	t	sig.p
Before 1995 (19 constructs)	3885	4.81	3884		
After 1995 (19 constructs)	3885	6.11	3884	-63.87	0.000*

Source : Pilot Study 2010/2011

Sig at $p < 0.05$

strategies in order to compete in the competitive education market. As well, higher learning institutions should understand the perceptions, requirements and expectations of their customers. Hence, this study aims to highlight several important factors to household's choice when selecting a particular higher learning institution in Malaysia.

The problems of higher education and education in general are one of the great challenges confronting society in the approaches to the era of globalization. Higher education should be more sensitive to consumers' concerns taking into account their perceptions and needs in all endeavors' of live during years of study, as to selection, curricula, teaching, and transiting to working like. These institutions should allow consumers (student and parent) to actively participate in decision-making concerning their academic and social life within the institution

The increased competition between higher education institutions is conferring greater importance to the institutions image in the era of globalization. Given the nature of the competitive higher education industry, it is necessary that the education services are provided with due care, skill, and diligence addressing the need of customers. Based on comparison of means, five variables influencing higher education institution choice decision in order of importance are as follow: financial aid, safety of the campus, academic reputation, university image and accommodation. Through factor analysis, three dimensions were revealed in explaining the decision criteria of Malaysian households, i.e., (1) personal factors, (2) socialization and (3) campus, program and cost.

In the context of higher education in Malaysia, an obvious trend has been the growing competition among private and local higher education institutions to attract students both locally and internationally. Competitive pressure has forced the higher educational institutions to look for more competitive marketing strategies in order to compete for students in their respective recruitment markets. Therefore, higher education administrators, marketers and policy makers must be aware of the requested heads of households' selection criteria because they are the decision influencers in the family. Therefore, higher education authorities should seek for improvement of their facilities, service quality and physical aspects. Educational administrators also should take note that the attributes identified in this research are considered important by households and failure to respond to these issues

will result in losing suitable competitive advantage from higher education industry[42].

Education is not a branch of the economy, and neither the educational process, nor its ultimate purposes, nor its results or 'production' are comparable with those of the economy. It is in itself a vital function, an essential sector of society and a condition of society's existence. Without it there is no society. It has at one and the same time cultural, socio economic, civic and ethical functions [43]. Consequently, higher education should aim at the following:

- to educate well-aware, autonomous and responsible citizens committed to national and universal principles.
- to produce highly trained professionals (skilled workers) to meet the needs of nation.
- to provide expertise to assist in economic, social development, scientific and technological research.
- to educate capable citizens in dealing with the challenges of the century and lifelong learning
- to help conserve and disseminate national and regional cultures, drawing on the contribution from each generation

This study, which is exploratory in nature, has some limitations. Firstly, the sample size ($N = 3885$), is insufficient to represent the whole population. The sample was only derived from the Peninsular Malaysia only, it might not give a thorough picture of view reflecting the whole Malaysian population. Secondly, the accessibility and evaluation of those questions in the questionnaire by respondents may not be accurate due to misunderstanding between the respondents' thoughts and the objective of the respective question. Honesty of respondents in answering questions during the survey is a related constraint in the study.

In conclusion, this study is an early effort to explore the wide fields of Malaysian education scene especially higher education from the viewpoint of the households. It is hoped that the further studies would provide more relative to the findings of this research.

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