

Choice of Higher Education Destination: Retaining International Students for Further Degree

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Abstract

This particular study attempts to identify the factors that affect the decision of the currently enrolled international students in pursuing their higher level of study in Malaysia. This study classifies the factors into two main motives i.e. investment and consumption motives. The result reveals that around 71.8 per cent of the currently enrolled international students decided to further their studies and out of that percentage, 44.7 per cent chose to study in Malaysia, instead of other countries. Their decision to remain in Malaysia for further degree is found to be highly related to the consumption motive as compared to the investment motive, suggesting that the cost factor is secondary. The study also suggests that a good quality of service, the reputation of the institutions and the faculty members, social factor and the extent of promotion significantly influence the students' decision to stay for further degree.

Keywords: Higher education, international student, retention, investment motive, consumption motive

1. Introduction

Internationalization of higher education is becoming a common phenomenon in the world market nowadays. In year 2012, it is estimated that there were 4.5 million students who pursued tertiary education outside their home country (OECD, 2014). Developed nations such as USA, UK, Australia & others are competing for the international students, as well as the developing nations such as Malaysia, Indonesia, China, Thailand & others. One of the reasons that lead to this competition is the contribution of international students to the economic activities in the host country. As for example, in year 2010, USA had received \$20,230 million (NAFSA 2011); UK and Australia received \$12,251 million and \$16,100 million from international students respectively (HM Government 2013; AEI 2012). Due to the fact that the business of higher education is a profitable business, many countries including Malaysia are trying hard to position themselves as the centre for educational excellence by becoming student hubs for higher education. The competition among countries in attracting international students has however intensified with the emergence of new players in the market. Students now have more choices of getting higher education at affordable price outside their home countries. Stiff competitions and the needs for retaining talent for the purpose of strengthening the knowledge based economy (talent hub) require, that these host countries rightly identify the critical factors that are not only influence the choices of the students in terms of their higher education destination but the ability of retaining them for the next level of study.

Theoretically from the economic viewpoint, there are three motives *i.e.* the investment motive (Borjas, 2009), consumption motive (Alstadsæter, Kolm, & Larsen, 2008) and signalling motive (Spence, 1973) that explained the educational choices of individuals. Investment motive is built on the premise of human capital theory in which investment is made based on the net return where the monetary benefits are compared to the cost of investment in higher education (Borjas, 2009).

The benefit can be in terms of higher job opportunities, greater chances of getting better position which translated into a better wage. According to Schultz (1961, 1962), the concept of human capital is based on the premise that people can enlarge their range of choices available to them by investing in themselves since not all economic capabilities are provided at birth. Through investment in education, one can enhance own welfare through the knowledge gained in the future apart from the innate ability. In other words, people can expand their productive capacity in the long run by investing in a higher level of education. Blaug (1976) also mentioned that the concept of human capital is the idea that people spend on education for the future pecuniary return. Therefore, the investment motive explains the case for an individual who chooses to invest in education in order to increase his/her job opportunities as compared to those who didn't invest by assuming that there is no on-job-training provided by the employers (Borjas, 2009).

On the other hand, individual might also make educational choice based on the consumption motive which is not solely based on monetary return but a non-pecuniary one. In other words, individual might choose to invest in education even if it is not generating higher monetary return or relatively high probability of employment (Oreopoulos & Salvanes 2014; Alstadsæter et al. 2008). Non-pecuniary return can be generated during or after studying. Joy of learning, life of being a student which allows him or her to involve in various activities beyond campus such as sports events, meeting new friends and others will contribute to an individual's utility directly. There might be a situation where higher education can increase individual's social status. Higher education might work as a signal to the society when they evaluate an individual's behaviour. Therefore, investment in higher education may increase an individual's utility in terms of their personal identity (Akerlof & Kranton, 2002). Besides, improving one's awareness towards a better health care such as consuming better nutrition, conducting medical check-up, exercising, choosing a living place with less pollution and also alert to the working hazards are the results of having education which then leads to the improvement in life expectancy of an individual.

However, the critic on human capital investment and consumption motive contended that education may not necessarily enhance an individual's productivity or may not necessarily enhance the non-monetary satisfaction but may be just serving as a pure screening device to signal the individual's productive ability to the employer. From the employment perspective, firms or employer will hope to employ a highly productive worker despite of lacking information regarding workers' productive capabilities. Therefore, the education level gained by an individual will function as a signal or "screening" for the employer to evaluate individual's potentials. Firms can always develop and use tests in recruiting workers with the required skills for particular occupation but this incurs some cost where rational firms will always try to minimize their cost. Therefore, firms decide to use education as an information providing tool during the hiring process, since this is the quicker and cheaper way to identify the most productive worker (Taubman & Wales 1973; Psacharopoulos & Woodhall 1985). As far as the signalling and investment motives are concerned, an attempt to segregate the former from the latter can be quite problematic, and thus quite often, the two motives are always being integrated and only known as the investment motive. Based on the understanding of the different motives influencing the educational choice of students, this paper attempts to ascertain which educational motives are dominant in influencing the decision of international students to remain in Malaysia for their next level of studies and hopefully will shed light on the importance factors that should be given greater attention either by the policy makers at the ministerial level or those in universities. This paper is organized into five sections. Following an introduction in section one, the second section will briefly discuss a theoretical framework of the educational choice model. Section three discusses the data and the methodology. The findings from this study are presented in the fourth section. The final section concludes the paper by providing some policy considerations.

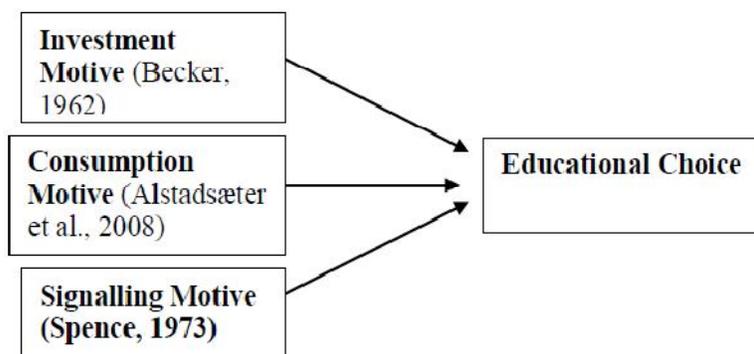
2. Educational Choice of Higher Education Destination (A Theoretical Framework)

According to Schultz (1961, 1962), investment in human capital can be classified into five categories which are education, on-the-job training, medical care, migration and information about job opportunity. In this paper, we will emphasize on investment in education. Through investment in education individual can enhance own welfare in the future. This means that, apart from the innate ability, human beings can expand his or her ability through the knowledge gained from investment in education. In other words, human beings can expand their productive capacity in the long run by investing in a higher level of education (Becker, 1962). One will decide to invest in education just similar to the investment in physical asset, where we need to weigh the current expenditures and the future returns. The cost-benefit analyses which are based on present value will allow us to compare the amount of money that we spent and receive in different time (Borjas, 2009).

Hence, investment in education will be undertaken by an individual when his or her present value of future benefits exceeds the investment cost. In some condition, individuals decided to invest in higher education does not necessarily influence by the monetary return. They will still willing to invest in educational that might have a relatively low wage or relatively high probability of unemployment (Alstadsæter et al., 2008). Higher education generates non-pecuniary return during the education process as well as after the completion (Alstadsæter & Sievertsen, 2009). Economics measure the satisfaction for consuming goods and service by utility. Utility is refer to the numerical score that measure the level of satisfaction or happiness that consumer receive when he or she consuming a market basket (Pindyck & Rubinfeld, 2008). The individual invest in higher education gains the total utility which is his or her preferences. According to the utility theory, every individual will try to maximize his or her utility with all the resource that they have. Economics assume that a person will tend to choose an option that yields him or her highest utility when given a choice from a number of options. Therefore, ones will continue to make additional investment in education if the benefits gains (in this case the benefit gains refer to non-pecuniary return) are more than the additional cost (Ehrenberg & Smith, 2000).

Furthermore, Spence (1973) indicated that education is just serving as a pure screening device without increase an individual's productivity. "Screening hypothesis" is a kind of identification device to identify the qualities of the commodities. Employers tend to assume that there is a direct relationship between the levels of education and the individual's productive capability. In other words, employer may not able to recognise the individual's productivity but assume that the levels of education that individual obtained may signal his or her working credibility. There are plenty previous studies did prove that obtaining a bachelor degree will give an individual a higher return compare to those without it (Wise, 1975) or schooling did used as a screening device for employer (Riley, 1979; Gullason, 2011) and the educational signals have more market value and play an important role in the largely unregulated and highly competitive labour markets such as Hong Kong (Heywood & Wei, 2004). Raymond and Sesnowitz (1975) who undertaken a research to examine the returns to investment in higher education indicate that there is evidence shows that obtaining a tertiary education degree in job market does not fully explain the increase in productivity of the particular worker but partially play as a screening device for employer. Therefore, this makes sense that an individual may invest in education just to obtain the signal that can provide to their future employer to differentiate themselves with others to gain a higher income return. Therefore, the individual choice of education can be model based on investment, consumption and signalling motive as shown in figure 1:-

Figure 1: An Underpinning Theoretical Framework of Educational Choice

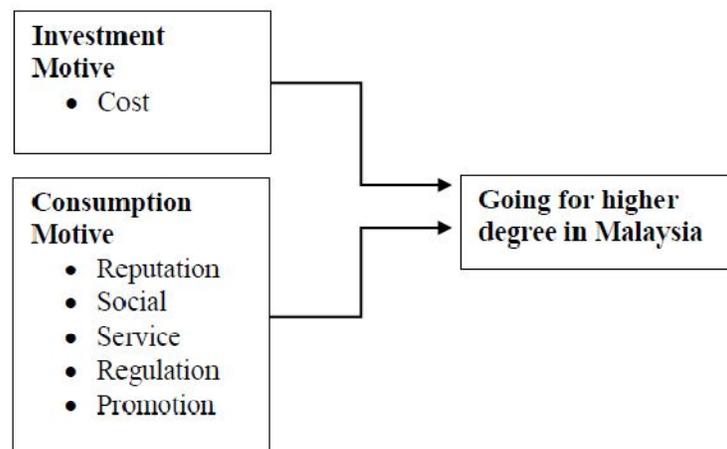


The international students' choices of higher education destination can be divided into two stages. The first stage is the choice of a particular country when they first make their decision to go abroad and secondly is their intention of whether to further his or her study at the higher level at the same host country. The decision made in the first stage is more or less based on certain predictions and the second stage (retention) which is the objective of this research involves the perception based on the real experience after they have enrolled in a particular institution. According to previous empirical studies, cost factor is always being the major concern of the international students for their choice of higher education destination (Mpinganjira 2011; Lim et al. 2011; Rohaizat et al. 2011). The cost factor includes the tuition fees and cost of living. The assumption here is that, being it an investment or consumption motive, the monetary return would be the same in both cases, thus the analysis will focus on cost factor alone when it refers to the investment motive. Hence, cost factor can be categorised under the investment motive.

Based on the cost-benefit analysis, the propose research framework suggests that the lower the cost and the higher the monetary return *i.e.* higher salary, the higher is the possibility that students will invest in education or in this case, to choose to retain at certain higher education destination. This is rational since most individuals will choose the host country's higher education institution that has value for their money. When the cost of education in the particular host nation increases, then it will reduce the potential return from investment in higher education. Therefore, cost is expected to have a negative impact on the choice of higher education destination.

Besides, this research framework also suggests that the consumption motive have a positive influence on the choice of higher education destination. As explained, individual may enjoy non-monetary return while or after the education process. The previous empirical study shows that university's reputation, social, service, regulation and the promotion carried out by the host nation are able to enhance the international students' utility. Therefore, if the host country and the institutions manage to provide the non- monetary return to the international students, then this will attract the currently enrolled international students to choose to continue to further their study there. Therefore, reputation, social, service, regulation and promotion factors are expected to have a positive impact on the choice of higher education destination (He & Banham 2011; Van Bouwel & Veugelers 2009; Li & Bray 2007; Mpinganjira & Rugimbana 2009; Perkins & Neumayer 2011a; Perkins & Neumayer 2011b; Pereda et al. 2007; Bodycott 2009) Since the data for this research consist of the international students that who are already in Malaysia, therefore, the present study will have the limitation in terms of analyzing the choice of educational destination in the first stage. However the data will allow for a deeper analysis with regards to student retention *i.e.* those who are going for higher degree at the same host country. Furthermore, due to the complication in disentangling the signaling motive from the investment motive for the educational choice (whereby both motives are based on cost-benefit comparison) thus, the signaling motive will be integrated into the investment motive since both motives are based on the same presumptions related to return to education. Therefore for the purpose of this study, we modeled the choice of higher education destination of international students based the two major motives *i.e.* the investment and the consumption motive as presented in figure 2:-

Figure 2: A modified Theoretical Framework of Educational Choice



3. Data and Methodology

3.1 Targeted Population and Sampling Method

The targeted population for this study is the total number of international students who are currently studying in Malaysian universities. Table 1 shows the total number of international students in Malaysian higher education institutions (HEI) as in year 2011:-

Table 1: The Total Number of International Students in Malaysian HEI in year 2011

University	2011
Public	25,855
Private	45,246
Total	71,101

Source: Ministry of Education, (2012)

In order to incorporate randomness (also the representativeness and generalizability) into the sampling design, a combination of different probability sampling methods are used in this study. First, the stratified random sampling is applied. The targeted populations are divided into five strata – public universities that being classified as Research University, Comprehensive University and Focus University and the private universities which are classified into private universities/university colleges and foreign universities branch (Ministry of Education, 2012). These five strata fulfil the characteristic of homogeneous within stratum and heterogeneous across stratum and thus one university is selected randomly from each stratum. Second, a quota sampling is applied where students are grouped by level of studies *i.e.* Master degree, Bachelor degree and Diploma. The reason for this classification is that the motive that influences the students' choice of their higher education destination may vary according to their level of studies. A pre-determined number of international students are then selected from each stratum. The sample size of each stratum are determined based on the size of the stratum, using the table of sample size determination for a given population size from Sekaran & Bougie (2010) for random sample size. Table 2 and Table 3 depicts the sampling design (combine methods) used in this research.

Table 2: First Stage – Stratified Sampling

A. First stage - stratified sampling					
Targeted population	Public universities			Private universities	
	Research	Comprehensive	Focus	Private	Foreign branch
Number of Universities ¹	5	4	11	32	4
Randomly selected university	UM ²	UIAM ²	UUM ²	MMU ³	UNIM ³

Note:

1. The list of universities are attached in appendix
2. The selected universities under the Research, Comprehensive and Focus university categories are Universiti Malaya (UM), Universiti Islam Antarabangsa Malaysia (UIAM), Universiti Utara Malaysia (UUM) respectively.
3. The selected universities under private and foreign branch categories are Multimedia University (MMU) & University of Nottingham Malaysia campus (UNIM) respectively.

Table 3: Second Stage – Quota Sampling

B. Second stage – quota sampling		Randomly selected University					
		UM	UIAM	UUM	MMU	UNIM	
Master	N	1,473	1,168	618	885	283	
	%	66.5	38.0	27.0	24.3	23.5	
Bachelor	N	743	1,907	1,673	2,663	919	
	%	33.5	62.0	73.0	73.2	76.5	
Diploma	N	0	1	0	92	0	
	%	0	0	0	2.5	0	
Total	N	2,216	3,076	2,291	3,640	1,202	12,425
	%	17.8	24.8	18.4	29.3	9.7	100.0
Targeted Sample	Total	178	248	184	293	97	1,000
	Master	118	94	50	71	23	356
	Bachelor	60	154	134	214	74	636
	Diploma	0	0	0	8	0	8
Achieved and useable Sample	Total	151	236	169	197	0 ¹	753
	Master	100	93	45	80	0	318
	Bachelor	51	143	124	117	0	435
	Diploma	0	0	0	0	0	0
Response rate	Total (%)	84.8	95.2	91.8	67.2	0	83.33 ²

Note:

1. Due to the requirement for approval from the ethical committee of UNIM, the questionnaires cannot be distributed and due to the time constraint, the analysis has to be performed without the samples from UNIM.
2. The response rate is calculated based on the 903 questionnaire (without the samples for UNIM).

3.2 Questionnaire and Methods of Analysis

This study uses a primary data, obtained through structured questionnaires. The data were collected during May 2013 to November 2013. Specifically, the questionnaire was divided into four sections. Section A is designed with the purpose of obtaining information on respondents' demographic and education background, Section B solicits information on the respondents' intention to further their higher level of studies and destinations. Section C focused on respondents' self-perception related to the improvement of their soft skills after studying in Malaysia and finally, Section D probed on the factors influencing respondents' choice of higher education destination and their willingness to recommend Malaysia to their family and friends. Most of the instruments used in this study were modified according to the previous studies (Rohaizat et al. 2011; Lim et al. 2011; Mpinganjira 2011; Pereda et al. 2007; Mazzarol & Soutar 2002). The descriptive analysis on the respondents' profile and the hypothesis testing on the mean differences of respondents' willingness to remain in Malaysia to pursue their next level of degree, across various social demographic categories and factors are carried out. Furthermore, one-way analysis of variance (one-way ANOVA) is conducted, which is widely used to compare more than two means in a single variable. In this study one-way ANOVA is used to perform the analysis on the level of satisfaction of the currently enrolled international students towards several factors.

4. Findings

4.1 Descriptive Analysis

This section describes the respondents based on their demographic characteristics, their financial and education background, their intention to further study and their willingness to remain in Malaysia for their next level of degree. Table 4 depicts the profile of the respondents. The majority of respondents are male (65.6 per cent) compared to female (34.4 per cent). In terms of age, majority of them are in the age range of 21 to 25 years old which make up 53.1 per cent of the total respondents. Students from the Middle East (30.7 per cent) recorded the highest percentage followed by African Nation (23.9 per cent) and South East Asia (23.8 per cent).

Table 4: Individual Background

	Frequency	%
Gender:		
Male	494	65.6
Female	259	34.4
Age:		
21 years old or younger	71	9.4
21 – 25years old	400	53.1
26 – 29 years old	197	26.2
30 years old and older	85	11.3
Home Country:		
East Asia	77	10.2
South East Asia	179	23.8
African Nation	180	23.9
Middle East	231	30.7
India Subcontinent	86	11.4

In terms of ways of financing higher education, Table 5 shows that the majority of respondents finance their education either by themselves or through a support from family (79.7 per cent). Meanwhile, 32.7 per cent of respondents spend above 15,000 US dollar yearly in Malaysia followed by 24 per cent spend between 5,001 to 10,000 US dollar. In addition 15.5 per cent reported that they did part-time jobs while pursuing their studies while 84.5 per cent did not.

Table 5: Financial Background

	Frequency	%
Financing education:		
Self/Parent support	600	79.7
Scholarship (from Malaysia)	28	3.7
Scholarship (other than Malaysia)	106	14.1
Loan	19	2.5
Work part-time:		
Yes	117	15.5
No	636	84.5
Expenditure in Malaysia :		
Below USD 5,000	146	19.4
USD 5,001 – USD 10,000	181	24.0
USD 10,001 – USD 15,000	180	23.9
Above USD15,000	246	32.7

Table 6 presents the education background of the respondents. In term of the distribution by level of study, 57.6 per cent of respondents were pursuing their Bachelor Degree and 42.4 per cent were undergoing the Master program. Out of the 345 respondents who were undergoing Master program, 32 per cent obtained their bachelor degree from Malaysian universities, while the remaining 68 per cent graduated from overseas. Out of 753 respondents who were studying in Malaysia, 43.9per cent had been in Malaysia for the period of three to five years followed by 35.1per cent spent more than five years. With regard to the field of study, students from Social Sciences, Business and Law made up 55.5 per cent of the total sample, 17.8 per cent are from Engineering, Manufacturing, Architecture and Construction and 16.1per cent were from Information Technology and Communication. In terms of their academic achievement, 42.2 per cent achieved their CGPA between 3.00 – 3.50, 30.3 per cent between 2.00 – 2.99, while 20.6per cent achieved between 3.51- 4.00. Out of the total respondents in this Master program, 57 of them are research-based candidates. Meanwhile, 72.6 per cent of the respondents had taken the required English test such as TOEFL or IELTS before enrolled into Malaysian universities and the remaining 27.6 per cent did not do so yet.

Table 6: Education Background

	Frequency	%
Education level:		
Bachelor	434	57.6
Master	319	42.4
Previous university obtain bachelor degree:		
Malaysian University	102	32.0
Non-Malaysian University	217	68.0
Length of time spends in Malaysia:		
12 month and below	34	4.5
13 – 36 month	264	35.1
37 – 60 month	331	43.9
61 month and above	124	16.5
Current field of study:		
Education, Religious, Art & Philosophy	64	8.5
Social Sciences, Business & Law	418	55.5
Information Technology & Communication	121	16.1
Engineering, Manufacturing, Architecture & Construction	134	17.8
Health sciences & Medicine	16	2.1
Current CGPA:		
2.00 – 2.99	228	30.3
3.00 – 3.50	318	42.2
3.51 – 4.00	155	20.6
Research Base	52	6.9
English test:		
Yes	547	72.6
No	206	27.4

Table 7 shows that 71.8 per cent of the international students have the intention to further their higher level of study. However, only 44.7 per cent of the 541 respondents who have the intention to further study are willing to continue their studies in Malaysia while 20.0 per cent decided to study in other countries and, 35.3 per cent remain uncertain of their next education destination.

Table 7: Continuation to Higher Level of Study

	Frequency	%
Intention to further study:		
Yes	541	71.8
No	212	28.2
Choose Malaysia to further study:		
Yes	242	44.7
Maybe Yes and Maybe No	191	35.3
No	108	20.0

4.2 Level of Satisfaction

One-way analysis of variance (ANOVA) was carried out as to determine the level of satisfaction among the currently enrolled international students towards the six factors namely, reputation, service, regulation, social, promotion and cost. Table 8 illustrated the outcome. The result shows that reputations reported the highest score ($M = 4.52$) as compared to other factors. The domains for reputation include the lecturer's academic quality, recognition of Malaysian institutions in their home country as well as at the international level. Results from one-way ANOVA rejected the null hypothesis of equal means for all the six factors jointly at a 1 per cent level. Furthermore, one-way ANOVA's post-hoc analysis provided detail mean comparison between the six factors. The post-hoc results showed that students were highly satisfied with the reputation and service factors as compared to the cost factor. As far as the cost factor is concerned, the lowest score however does not signify that the students are not satisfied with the fee and the living expenses as the mean score is higher than 4.00 on the 7 points likert scale. It only implies that, as compared to other factors, students are less satisfied with the costs that they have to bear.

Table 8: Level of Satisfaction

Descriptive statistic	Mean
Reputation	4.52
Service	4.51
Regulation	4.48
Social	4.43
Promotion	4.35
Cost	4.11
One-way ANOVA	P-value
Overall	1%
Reputation, Social, Regulation, Service, Promotion > Cost	5%
Reputation, Service > Promotion	5%
Regulation > Promotion	10%

4.3 Hypothesis Testing

Independent-sample t-test and the chi-square test of independence were carried out to test the mean difference between the two groups (those who chose Malaysia as their further study destination and those who did not choose Malaysia) in relation to various characteristics of social demographic variables and also of the educational choice motives¹. It is important to note that the analysis in this section was first conducted with full sample (753 observations). In addition, further analysis that only confined to the respondents who intended to further their study and those who had confirmed to choose either Malaysia or other host countries as their further study destination was conducted (349 observations). Further analysis was conducted in order to check the consistency of the full sample's result which includes those with no intention to further study and those who were uncertain with their further study destination. Moreover, further analyses will provide an in-depth finding on the impact of the educational choice motive and social demographic towards the currently enrolled international students' choice to choose Malaysia as their further study destination.

4.3.1 Hypothesis Testing on Full-Sample

Table 9 depicts the result of the analysis on the full-sample related to which motive is dominant in influencing the currently enrolled international students' choice in choosing Malaysia as their further study destination. It is also important to highlight here that the variables construct under the investment and consumption motive were based on the previous study. The mean differences (between those who choose and do not choose Malaysia as their further study destination) are significant at 1per cent level for services, promotion, reputation, social, and regulation factors (consumption motive), as well as the cost factor (investment motive). The finding implies that both consumption motive (service, reputation, social and promotion) and investment motive (cost) are capable of distinguishing those who intend to choose Malaysia as their further study destination and those who do not. From Table 8, it is clear that, compared to those who do not choose Malaysia for their further studies, those who choose Malaysia score higher mean value across all the factors that influencing their choice. The highest mean difference scored is for service (0.4989), followed by reputation (0.3976), social (0.3835), and promotion (0.3453). On the other hand, regulation and cost reported a mean difference of less than 0.3. This result is consistent with the previous studies, who found that these factors are important in attracting international students such as Lim et al. (2011), Yang (2007), Mazzarol & Soutar (2002) and Binsardi & Ekwulugo, (1999).

¹ The factors were categorized into different motives based on previous studies

Table 9: Independent Sample t-test: Consumption and Investment Motives

	To choose Malaysia as further study destination			
	Yes	No	Mean different	P-value
Service	4.8193	4.3204	0.4989	0.000
Reputation	4.7542	4.3566	0.3976	0.000
Social	4.9462	4.5627	0.3835	0.000
Promotion	4.6118	4.2664	0.3454	0.000
Regulation	4.2878	4.0505	0.2373	0.008
Cost	4.5299	4.3158	0.2141	0.003

Furthermore, Table 10 depicts that age, period been in Malaysia and the students' CGPA result are the social demographic factors (continuous variables) that reported significant mean difference. In particular, the mean age of international students who are more likely to choose Malaysia to further their study is around 1.67 years older than the mean age of international students who do not choose Malaysia, whereas, those who had been in Malaysia relatively longer tend not to choose Malaysia as their further study destination. Moreover, the currently enrolled international students with the CGPA of 3.2 and above are more likely to choose Malaysia.

Table 10: Independent Sample t-test: Socio-Demographic Factors

	To choose Malaysia as further study destination			
	Yes	No	Mean difference	P-value
Age	26.38	24.71	1.67	0.000
Period been in Malaysia	40.22	44.65	- 4.43	0.002
CGPA result	3.2089	3.1404	0.0685	0.040

Table 11 shows the results of chi-square independent tests. The results clearly shows that the intention to further study in Malaysia is found to be significantly related to the home country, level of study, current field of study and mode of education financing. In terms of home country, the international students from African Countries (43.3 per cent) formed the largest percentage in choosing Malaysia as their further study destination compared to other region such as the Middle East (34.6 per cent). Meanwhile, students from South East Asia seem to be the least, with only 19.0 per cent reported their intention to choose Malaysia, thus provide evidence that Malaysia seems to be popular among the African students while not among students from South East Asia. Meanwhile, international students who are undergoing Master program show higher percentage of continuing their higher degree in Malaysia (38.6 per cent) compared to those who are undergoing bachelor program (26.5 per cent). This outcome is parallel with the age outcome reported earlier. Furthermore, international students who are enrolled in the Health Science & Medicine recorded a relatively higher percentage (68.8 per cent) in choosing Malaysia as their further study destination compared to those who enrolled in Education, Religious, Arts & Philosophy (39.1 per cent), Information Technology & Communication (33.9 per cent), Social Sciences, Business & Law (29.4 per cent), and lastly Engineering, Manufacturing, Architecture & Construction (28.4 per cent). In addition, the currently enrolled international students who are financed by scholarship provided by other than Malaysia (40.6 per cent) are more likely to choose Malaysia as their further study destination as compared to those who are financed by the scholarship that provided by Malaysian government (35.7 per cent), financed by themselves or from family support (30.5 per cent) and those who finance by loan (10.5 per cent).

Table 11: Chi-square test of Independence

	To choose Malaysia as further study destination		
	Yes (%)	No (%)	P-value
Home Country:			0.000
East Asia (n=77)	24.7	75.3	
South East Asia (n=179)	19.0	81.0	
African (n=180)	43.3	56.7	
Middle East (n=231)	34.6	65.4	
Indian Subcontinent (n=86)	31.4	68.6	
Level of study:			0.000
Bachelor (n=434)	26.5	73.5	
Master (n=319)	38.6	61.4	
Field of study:			0.008
Education, Religious, Arts & Philosophy (n=64)	39.1	60.9	
Social Sciences, Business & Law (n=418)	29.4	70.6	
Information Technology & Communication (n=121)	33.9	66.1	
Engineering, Manufacturing, Architecture & Construction (n=134)	28.4	71.6	
Health Sciences & Medicine (n=16)	68.8	31.2	
Finance Education:			0.038
Self/Family support (n=600)	30.5	69.5	
Scholarship (from Malaysia) (n=28)	35.7	64.3	
Scholarship (other than Malaysia) (n=106)	40.6	59.4	
Loan (n=19)	10.5	89.5	

Note: n is equal to the number of items

4.3.2 Hypothesis Testing on Sub-Sample: Further Analysis

Furthermore, in this section, further analysis on the sub-sample is conducted. This analysis is only confined to those who have the intention to further study. Table 12 illustrated the outcome of the analysis on the sub-sample. Table 12 depicted the impact of the educational choice motive towards the currently enrolled international students' choice to choose Malaysia as their further study destination is significant at 1 per cent level. This outcome is consistent with the full-sample analysis where the investment and consumption motives significantly influenced the currently enrolled international students' choice in choosing Malaysia as their further study destination. Service factor appears to be more important relatively compared to other factors in influencing the currently enrolled international students' decision-making. Moreover, the consumption motive appears to be dominant compared to the investment motive in influencing the currently enrolled international students' choice to choose Malaysia as their further study destination.

Table 12: Independent Sample t-test for Sub-Sample: Consumption and Investment Motive

	To choose Malaysia as further study destination			
	Yes	No	Mean different	P-value
Service	4.8193	4.0751	0.7442	0.000
Reputation	4.7542	4.1629	0.5913	0.000
Social	4.9462	4.3705	0.5757	0.000
Regulation	4.2878	3.7545	0.5333	0.000
Promotion	4.6118	4.0786	0.5332	0.000
Cost	4.5299	4.0815	0.4484	0.000

5. Conclusion

This paper examines the factors that influence the decision of international students who are currently studying in Malaysia whether to remain in the country for further degree. The result suggests that a good quality of service, the reputation of the institutions and the faculty members, social factor and the extent of promotion are significantly influence the students' decision to remain in Malaysia for further degree, thus signifies the importance of consumption motives in determining their educational choice. Even though the cost factor seems to play an important role, nevertheless the consumption motive proved to dominate. Based on the findings, it is thus crucial for the higher education institutions in Malaysia to focus on improving quality and standards in education which includes improving education delivery and outcomes. Government policies related to quality assurance and accreditation procedures should be further enhanced. Another important point that needs to be addressed is to create policy tasks aimed at improving infrastructure and establishing effective administration and support system. Sensitivity towards creating comfortable and secure social environment are also of upmost important. As far as the promotion is concerned, the right marketing strategy should be put in place. It should not only limit to attracting new students to come but should also focus on retaining the existing students to further their higher level of degree in Malaysia.

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Appendix

The list of Malaysian Public University

1. UM Universiti Malaya
2. USM Universiti Sains Malaysia
3. UKM Universiti Kebangsaan Malaysia
4. UPM Universiti Putra Malaysia

5. UTM Universiti Teknologi Malaysia
6. UIAM Universiti Islam Antarabangsa Malaysia
7. UUM Universiti Utara Malaysia
8. UNIMAS Universiti Malaysia Sarawak
9. UMS Universiti Malaysia Sabah
10. UPSI Universiti Pendidikan Sultan Idris
11. UiTM Universiti Teknologi MARA
12. UDM Universiti Darul Iman Malaysia
13. USIM Universiti Sains Islam Malaysia
14. UMT Universiti Malaysia Terengganu
15. UTHM Universiti Teknologi Tun Hussein Onn Malaysia
16. UTeM Universiti Teknikal Malaysia Melaka
17. UMP Universiti Malaysia Pahang
18. UniMAP Universiti Malaysia Perlis
19. UMK Universiti Malaysia Kelantan
20. UPM Universiti Pertahanan Nasional Malaysia

The List of Malaysian Private University:

1. HELP HELP University
2. MEDIU Al-Madinah International University
3. UniKL Kuala Lumpur University
4. INCEIF International Centre for Education in Islamic Finance
5. INTI INTI International University
6. MUST Malaysia University of Science and Technology
7. MSU Management and Science University
8. MMU Multimedia University
9. QUIP Premier International University Perak
10. Sunway (SYUC) Sunway University
11. Taylor Taylor's University
12. AIU AlBukhary International University
13. UNISEL Selangor Industrial University
14. IMU International Medical University
15. LUCT Limkokwing University of Creative Technology
16. UTP PETRONAS University of Technology
17. UNITEN University Tenaga Nasional
18. OUM Open University Malaysia
19. WOU Wawasan Open University
20. UNITAR University Tun Abdul Razak
21. UTAR University Tunku Abdul Rahman
22. UCSI UCSI University

Private University College:

1. AUCMS Allianze University College of Medical Sciences
2. AP-UCTI Asia Pacific University College of Technology and Innovation
3. IUCN International University College of Nursing
4. KDU UC KDU University College
5. CUCMS Cyberjaya University College of Medical Science
6. Berjaya Berjaya University College of Hospitality
7. KUIS Selangor International Islamic University College
8. Linton Linton University College
9. Nilai Nilai University College
10. SEGI SEGI University College
11. UCSA Shahputra University College
12. IUCTT International University College of Technology Twintech

13. KLMUC Kuala Lumpur Metropolitan University College
14. KUIN INSAHNIAH University College

Branch Campus of Foreign University:

1. MUSM Monash University Malaysia
2. NUMed Newcastle University Medicine Malaysia
3. Swinburne Swinburne University of Technology (Sarawak Campus)
4. UNIM University of Nottingham in Malaysia

Source: Ministry of Education (2011)