

**Investigating Key Factors Influencing
International Students' Choice of Private
Higher Education Institutions (HEIs)
in Malaysia**

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A thesis submitted in fulfilment of the requirements of the degree of
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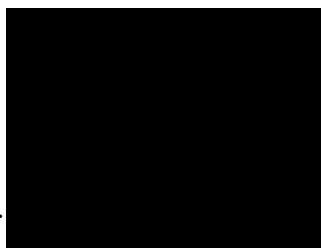
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To my dad and mom, thank you for your unconditional love and support!
To Michelle, my supervisor, thank you for your patience and guidance!

STATEMENT OF DECLARATION

I, Teah Woon Sim Chloe declare that the DBA thesis entitled “The title of this thesis is ‘Investigating Key Factors Influencing International Students’ Choice of Private Higher Education Institutions (HEIs) in Malaysia” is no more than 65,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature .



Date.....15 January 2018.....

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ABSTRACT

The Malaysia government in its 2015-2025 education blueprint articulated the aim to develop the country into an education hub through its 659 higher education institutions (HEIs) of which 509 are privately owned. The higher education sector in Malaysia faces intense competition pressure at both international level (competing with other countries) and domestic level (HEI providers competing with each other in Malaysia) in attracting and recruiting international students. It is therefore vital for higher education providers particularly the private HEIs to identify and understand the key factors influencing international students' decision-making in choosing HEIs in order to strategically position themselves based on these factors for long-term viability and achieving the aim of the 2015-2025 education blueprint.

This study uses structural equation modelling (SEM) to develop a model that integrates both consumer decision-making model and the push-pull theory for identifying and investigating the key factors influencing international students' decision-making in choosing private HEIs in Malaysia. This thesis adopts a holistic approach by looking into international students' total overseas study experience that comprises of entire study, living and social lives within the academic and host country context; their satisfaction in regard to their study decisions and future word of mouth behaviour in consumer referrals. The model in this study was empirically tested with a cluster random sample of 435 full-time international undergraduate and postgraduate students who are enrolled in a private HEI in Malaysia. A total of 29 private HEIs participated in the study and this research constitutes a pioneer attempt to include all four types of private HEIs (private university, foreign university branch campus, university college and private college).

The study discovers that international students' decision to study abroad typically derives internally from their perception that overseas education is better than the home country qualifications. When it comes to deciding where to study, a positive study destination reputation portraying a foreigner-friendly image are key attractions for international students when evaluating a host destination. Other host country supporting traits include political stability and safety for a conducive study environment, social and cultural diversity, as well as easy visa processing and a flexible migration system.

The study also discovers that respondents placed greater emphasis on the choice of institution than the choice of country destination when it comes to making decisions pertaining to overseas education. The SEM results offer important insights into the differentiating institutional characteristics that attracted international students to study in Malaysia. The most dominant influencing institutional factor is related to campus facilities and a good support system. The subsequent deciding factors pertain to a quality education in terms of a distinctive institution image, which is often represented by its reputation and international recognition and the range of academic programs and courses. Other supporting institution traits include strategic location and ease of entry requirements.

This study also finds a positive relationship between international students' study decision and their satisfaction towards their HEI, as well as satisfaction towards their social experience in Malaysia. In addition, overall satisfaction of the respondents has been found to have a significant effect on their willingness to recommend Malaysia and their private HEIs to others via word of mouth - a potentially free marketing tool that higher education providers could use to recruit international students. This thesis identifies that future research on operationalising the construct of overall satisfaction is warranted for advancing the understanding of the importance of overall satisfaction in international students' choice of private HEIs.

Lastly, group comparison is undertaken in this study to determine whether there have been differences in the perception of key influencing factors and overall satisfaction based on gender and different HEI types. In the terms of gender differences, this thesis reports no apparent gender discrepancy in international students' perception across a wider range of host country and institutional considerations. Likewise, the study finds no difference in overall satisfaction between male and female students towards their private HEIs in Malaysia. In regard to comparison of international students from different HEI types, the study finds there is no difference in their perception of key factor influencing their choice of private HEIs in Malaysia regardless whether they are studying at private university, foreign university branch campus, university college or private college. However, the study finds a significant difference in the overall satisfaction of international students from private university, foreign university branch campus, university college and private college. International students from university

colleges appeared to have the least overall satisfaction with their choice of their HEI in Malaysia.

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List of Abbreviations

AMOS	Analysis of Moment Structures
AVE	Average Variance Extracted
CDM	Consumer Decision Making
CFA	Confirmatory Factor Analysis
COR	Country of Origin
CR	Critical Ratio
CRDIFF	Critical Ratio Difference
DF	Degrees of Freedom
EFA	Exploratory Factor Analysis
HEI	Higher Education Institution
ICEF	International College of Economics and Finance
IPTS	Institut Pengajian Tinggi Swasta
KLEC	Kuala Lumpur Education City
KMO	Kaiser-Meyer-Okin
MEB	Malaysia Education Blueprint
MOHE	Ministry of Higher Education
MQA	Malaysia Qualifications Agency
MSV	Maximum Shared Variance
NHESP	National Higher Education Strategic Plan
PAF	Principal Axis Factoring
RMSEA	Root Mean Square Error of Approximation
SE	Standard Error
SEM	Structural Equation Modelling
SMC	Squared multiple correlation
SPSS	Statistical Package for Social Science
SRMR	Standardised Root Mean Square Residual
UKCOSA	UK Council for International Education
WOM	Word-of-Mouth

CHAPTER 1 INTRODUCTION

1.0 Introduction

Chapter 1 begins with a succinct snapshot of higher education in Malaysia. The introduction includes a highlight of Malaysia's achievements in higher education nationally and worldwide, a brief introduction of the key governing bodies, as well as an overview of the different types of higher education providers in Malaysia. The first chapter exemplifies the development of the higher education system in Malaysia by examining the past and current state of performance, focusing on the review of Malaysia's government efforts in growing the industry. The observation encompasses what Malaysia's government has done in the past and their current initiatives and policies on internationalising higher education. Subsequently the government's ambitious vision for transforming Malaysia into an education hub by the year 2020 is observed. This includes a pragmatic examination of government efforts in facilitating the changes. Alongside the discussions, research problems and gaps will be raised and research objectives with intended outcomes will be addressed to justify the rationale of why the study was conducted. This chapter will then conclude by clearly defining the key terminologies used in this study, followed by an outline of the topics in this thesis.

1.1 Overview of Higher Education in Malaysia – At Present

Higher education plays an important role in building a more resilient Malaysia and maintaining sustainable economic growth (Study Malaysia Online, 2015). Growing the higher education system has always been a top priority of the Malaysian government over the past few decades (Jamshidi et al., 2012). The Malaysian government recognises the need to keep evolving in order to stay ahead of global trends and competition (Ministry of Higher Education, 2015). The evidence was apparent when the government allocated RM13.9 billion (13% increase from 2017) of its national budget for education and training purposes (Lee, 2017). A rise in the 2018 budget on education is definitely a commitment the government has made to develop the higher education sector. According to the Minister of Higher Education Malaysia, Datuk Seri Idris Jusoh, Malaysia is ranked as the 9th most preferred study destination in the world by UNESCO in 2015 (The Star, 2015). This was definitely a significant improvement, as previously Malaysia ranked 12th in place in 2014 (Study Malaysia Online, 2016).

There are numerous potencies that make Malaysia an attractive study destination for international students. The minister credited the success as an outcome of Malaysia's excellent education quality, affordable cost of living and sociocultural diversity (Study Malaysia Online, 2016).

Other attainments also include Kuala Lumpur being voted as the most affordable city for students in 2016 by QS Top Universities for a winning combination of low tuition fees and low living costs compared to other participating countries. The affordability of living and studying, due to its favourable exchange rate with other countries, has been discovered as the main attraction for international students (Study Malaysia Online, 2017). As reported by Top Universities (2015), general living costs in Kuala Lumpur are fairly low and international students can expect to pay annual tuition fees of around USD3000–5000 on average per year.

In addition, Malaysia ranked 28th in the Global Peace Index (2015); this makes Malaysia an appealing study destination as the country is considered to be comparatively safe and politically stable, with a relatively low crime rate. Malaysia also benefits from being free from most natural disasters and its physical attributes are attractive. Other incentives include the ethnicity and cultural diversity in Malaysia (Study Malaysia Online, 2015). The convergence of different cultures, religions, ethnic groups and traditions brings new exposure to international students and these international experiences can be value added to their personal and career development (Study Malaysia Online, 2015).

It is often believed that a country can develop its global competitiveness through developing higher education (Stromqvist, 2007) and growing the number of international students has been a continuous effort of the Malaysian government (Ministry of Higher Education, 2015). Malaysia has recorded a steady growth on the international student enrolment rate (ICEF Monitor, 2012). ICEF statistics show that Malaysia recruited 80,000 international students in 2009 from more than 100 countries (ICEF Monitor, 2012). The number of international students increased to 93,000 in 2011 (Study Malaysia Online, 2015). Malaysia has accounted for approximately 2% of the global international student market (UNESCO, 2014). As of December 2017, Malaysia is currently hosting 126,589 international students from more than 100

countries, based on the official record (Ministry of Higher Education, 2018b). These achievements are evidence that the Malaysian higher education sector has grown tremendously well over the past decades.

1.2 Key Governing Authorities of Higher Education in Malaysia

All higher education institutions (HEIs) in Malaysia come under the supervision of the Ministry of Higher Education (MOHE), the governing authority to oversee the development and expansion of the higher education sector in Malaysia. The primary role of MOHE includes setting clear directions and sound policies in making Malaysia an education hub by the year 2020 (Study Malaysia Online, 2015a). MOHE is also responsible for strengthening Malaysia's competency in the era of globalisation through the continuous efforts of internationalising the Malaysian higher education sector (Study Malaysia Online, 2015a). There are a number of other higher education related agencies that come under MOHE supervision: Malaysia Qualification Agency (MQA), National Higher Education Fund Corporation and Tunku Abdul Rahman Foundation, to name a few. The qualifications awarded by all HEIs (both public and private) that are registered under Malaysian laws are governed by the Malaysian Qualifications Agency (MQA) (Study Malaysia Online, 2015a). As the national quality assurance agency, MQA is entrusted to monitor and regulate the quality and standard of all qualifications as well as the accreditation of all higher educational programs in the country. MQA's key responsibility is to ensure a unified system of qualifications awarded in Malaysia through the implementation of the Malaysian Qualifications Framework (Malaysia Qualifications Agency, 2018). The National Higher Education Fund Corporation and Tunku Abdul Rahman Foundation on the other hand are among the main providers of financial aid from the government. The former provides study loans to Malaysian students for funding their higher education studies while the latter provides financial assistance in the form of scholarships (Study Malaysia Online, 2015).

1.3 Higher Education Providers in Malaysia

There are two types of higher education institutions in Malaysia (Study Malaysia Online, 2015a):

- Public higher educational institutions are HEIs that are fully funded by the government (public universities, polytechnics, community colleges and public colleges). Public HEIs are governed as self-managed HEIs.
- Private higher educational institutions are HEIs that are privately owned (private universities, foreign university branch campuses, university colleges, private colleges). These independent HEIs are self-funded and run by commercial organisations.

At present Malaysia has 150 public HEIs and 509 private HEIs (Malaysia Qualifications Agency, 2018). Both public and private education providers play an equally important role in growing the Malaysian higher education sector (Study Malaysia Online, 2015a). These large numbers of HEIs offer a wide variety of tertiary qualifications or courses with different pathways and are competing fiercely to differentiate among themselves (Ministry of Higher Education Malaysia, 2015). The distinctions that separate the two types of HEIs mainly lie within the tuition fees charged and the medium of instruction used. Tuition fees for public HEI students are typically highly subsidised by the government, while students at private HEIs pay full fees. English is used as the primary medium of instruction at most of the private HEIs in Malaysia; it is, however, used only for postgraduate programs at public HEIs. Bachelor degree courses at these public HEIs are still primarily taught in Bahasa Melayu, the national language of Malaysia.

1.3.1 Public HEIs in Malaysia

The 150 public HEIs in Malaysia can be further categorised into three groups: 36 public universities, 33 polytechnics, and 177 community colleges/public institutions (community colleges, teacher education institutes, training institutes and training centres) (Malaysia Qualifications Agency, 2018). The distinction between public HEIs lies within the type of programs and courses delivered. Public universities offer bachelor and postgraduate degrees with some offering programs at diploma level and university foundation programs; polytechnics and community colleges typically focus on offering certificate and diploma level programs. Teacher education institutes specialise in training candidates to become teachers at primary and secondary schools in Malaysia. Training institutes/centres, on the other hand, are only allowed to deliver vocational-based training programs.

1.3.2 Private HEIs in Malaysia

Private HEIs in Malaysia are also known as Institut Pengajian Tinggi Swasta (IPTS) and they play an equally important role alongside public HEIs in the provision of tertiary education in Malaysia (Study Malaysia Online, 2015a). There are 125,589 international students studying at HEIs in Malaysia, of which 80% (100,765) are enrolled in private HEIs in Malaysia (Ministry of Higher Education, 2018b). In terms of the number of private HEIs in Malaysia, the number rose from 452 in 2011 to 509 as of March 2018 that are officially registered under the Malaysian Qualifications Agency (MQA). The four types of private HEIs are – 66 private universities, 39 university colleges, 9 foreign university branch campuses and 395 private colleges (Malaysian Qualifications Agency, 2018). Under the authority of the MQA there are clear set criteria to distinguish between private universities (private universities, foreign university branch campuses and university colleges) and private colleges. The foremost criteria distinguishing between a private university and a private college is that the former possesses the right to confer degrees while the latter does not (Tan, 2002).

Private universities usually award their own qualifications at postgraduate, undergraduate bachelor degree, diploma and foundation levels. University colleges are private HEIs that have yet to obtain full university status. Like private universities, university colleges also have the power to award degrees. Foreign university branch campuses are offshore campuses of foreign universities in Malaysia. These HEIs are invited by the Malaysian government to establish a branch campus and to award qualifications that are identical to their host universities (Study Malaysia Online, 2015a). Foreign university branch campuses are subject to various joint ownership requirements in Malaysia, one of which is that a local partner has to have a stake in the ownership (Lane, 2010). Private colleges, on the other hand, focus on delivering their own qualifications at diploma and certificate levels.

Many of these private HEIs (private universities, university colleges, private colleges) also collaborate and form alliances with foreign renowned universities to offer a plethora of programs and courses i.e. the twinning degree arrangement and 3+0 program (Study Malaysia Online, 2015a). Twinning degree programs (2+1 or 1+2 programs) are split degree programs jointly collaborating with a reputable foreign university from countries like the United States, United Kingdom, Australia and New

Zealand. In a twinning program, students will undergo the same course as students in the host country and complete the remaining year(s) at partner HEIs overseas. 3+0 programs are an extension of the twinning programs. Under this arrangement, students complete the entire foreign university degree qualifications in Malaysia, while obtaining the same qualifications as the students in a host university overseas (Study Malaysia Research Team and Study in Malaysia Handbook, 2016). Malaysia's private HEIs are popular because they offer a wide spectrum of study options and a choice of both local and foreign university qualifications of international standing to suit individual preferences (Study Malaysia Online, 2015a). These inter-institutional collaborative arrangements with foreign counterparts allow students to acquire foreign university degree qualifications in a much more cost-effective manner (Study Malaysia Online, 2015b).

The other areas that separate the private HEIs with university status from those with non-university status are in regard to research involvement, staff qualifications and fees charged (Tan, 2002). Private universities often emphasise academic staff members' research involvement on top of their teaching responsibilities. These private HEIs also have more stringent requirements in terms of staff qualifications than the private colleges (Tan, 2002). It is the MQA's requirement for universities to develop their own research portfolios; it is also an obligation for universities to have doctoral level academic staff members. In fact the minimum qualification to teach at private universities is a master's degree. Private colleges, on the other hand, do not need to undertake research as required by the MQA. In terms of academic staff qualifications, a bachelor degree qualification is sufficient (Tan, 2002). Another difference that sets them apart is the availability of facilities and infrastructure. Private HEIs with university status generally have better and well-equipped facilities (Ancheh et al., 2007). When it comes to profitability, all private HEIs rely primarily on tuition fees as the primary source of revenue (Tan, 2002). However, in terms of tuition fees charged, the difference is quite apparent across the different types of private HEIs. Private universities in general charge higher fees than private colleges and the higher fees are well justified by the higher qualification awarded, the superior teaching staff, as well as better and well-equipped facilities as discussed above (Tan, 2002).

1.4 Profile of International Students in Malaysia

Malaysia's main target markets for international student recruitment are Asian, Middle Eastern and African countries. The Top 10 countries of origin of international students are Bangladesh, Nigeria, China, Indonesia, Pakistan, Yemen, Sudan, Iran, Libya, and Kazakhstan (Malaysian Qualification Agency, 2018). These countries in aggregate contribute 71% of the total number of international students in Malaysia. According to the latest statistics, Malaysia is currently a host for 126,589 international students with 80% (100,765 students) of total international students being currently enrolled in private HEIs in Malaysia. Based on gender, 76.6% (77,201 students) of the total international students are male and 23.4% (23,564 students) are female. These students are enrolled in different programs and courses in Malaysia. The percentage of international students pursuing postgraduate studies (master's and PhD degrees) is 10.6%; 45.4% are enrolled in undergraduate studies (bachelor degrees); 36.8% are studying a diploma course; the remaining international students are undergoing certificate level courses (Ministry of Higher Education, 2018b).

1.5 Higher Education in Malaysia – In the Past

Malaysia's higher education system has significant changes and reforms over the last few decades. During the British colonisation era, education was not a priority and there was no proper policy on governing and growing the education system. Back then education was acquired informally, mainly as basic living skills (Grapragasem et al., 2014). It was only after World War II, especially after the independence of Malaysia in 1957, that the structured policy on education was formulated. The National Education System was implemented after the *Education Act 1966* was passed by parliament. The government began to foster the growth of national education in a more systematic manner (Grapragasem et al., 2014). However, despite the introduction of a more formal education system, funding national higher education was still not a priority of the Malaysian government. Prior to 1970 there was only one university in the whole country responsible for producing skilled labour to meet perceived economic needs. The opportunity to enrol in the country's only university was highly limited, and as a result, Malaysian students turned to overseas countries to pursue their tertiary education (Jamshidi et al., 2012). Malaysia became a main exporter of international students studying overseas in the USA, the UK and Australia until the 1990s (Kaur et al., 2008).

The impetus for privatising the higher education sector came only after the Asian Financial Crisis. The volatile foreign currency exchange and the escalation of overseas education costs meant that students could no longer afford the high cost of funding their overseas education. Students were forced to turn back to Malaysia for local education. However, the limited capacity within the public higher education sector resulted in a great number of students who, although met the entry criteria, failed to attain a university placement (Jamshidi et al., 2012). Similarly, the tremendously high cost became a burden for the Malaysian government to continue financing the sponsored students' overseas education (Fahmi, 2007; Arokiasamy, 2010; Jamshidi et al., 2012). The government realised that the education system that was fully run by a state monopoly back then was no longer able to meet the increasing demand for higher education (Jamshidi et al., 2012).

The Malaysian government saw privatisation as the solution to rectify the situation and started to work on a series of restructuring strategies (Jamshidi et al., 2012; Migin et al., 2015). With the passage of the *Private Higher Education Institutions Act 1996*, the government began to encourage the private sector to play a complementary role in the provision of tertiary education (Arokiasamy, 2010). The number of private HEIs in Malaysia has grown tremendously since then (Knight & Sirat, 2011). Under this Act, a proper legal framework was formalised to clearly outline the requirements for establishing private institutions and the establishment of different private HEIs was introduced: private universities, university colleges, foreign university branch campuses and private colleges. The *Private Higher Education Institutions Act 1996* also paved the way for the government to invite reputable foreign universities to establish branches in Malaysia. Appropriate legal and regulatory changes have been made to facilitate the establishment of various forms of collaborative arrangements (i.e. twinning programs) between foreign and local providers (Sarjit et al., 2008).

1.6 Higher Education in Malaysia – The future

Malaysia's vision of transforming into an education hub can be traced back to as early as 2007, during the launch of the National Higher Education Strategic Plan 2007–2020 (NHESP). This vision seeks to enhance Malaysia's position as a hub for higher education in the region and internationally by the year 2020 (Ministry of Higher Education, 2007). The NHESP has three development phases: Phase 1 began with a

comprehensive review of current performance and the progress of Malaysia's higher education system; Phase 2 was the conceptualisation of the Malaysia Education Blueprint 2013–2025 (pre-school to post-secondary education) or MEB. New initiatives that are carefully aligned to existing national plans are introduced; Phase 3 was the finalisation of MEB 2013–2025 (Higher Education) or MEB (HE) with details of the blueprint being finalised followed by the official announcement of the education blueprint to the general public (Ministry of Higher Education, 2015). Through the announcement of MEB (HE) 2013–2025 in December 2012, new targets pertaining to the higher education system have been revised. The focus is on making changes that are in line with international best practices of high-performing education systems (Ministry of Higher Education, 2015).

A growing international student market, for instance, has been highlighted as one of the key initiatives in alignment with the new targets set. Malaysia aims to become the world's sixth-largest exporting country in international education with an enrolment target of 200,000 international students by 2020 (ICEF Monitor, 2012). The number of international students is expected to increase to 250,000 by 2025 (Ministry of Higher Education, 2015). Enrolment and access to tertiary education have also been raised from 36% to 53% by adding 1.1 million additional places for post-secondary education. This will bring the total higher education enrolment rate to 70% to secure Malaysia as having the highest enrolment rate for tertiary education in ASEAN by 2025 (Ministry of Higher Education, 2015). The expansion emphasis is set on growing the private HEI sector with an annual growth rate of 5.1%. The number of students enrolled in private HEIs is projected to exceed those enrolled in public HEIs by 2025 (Ministry of Higher Education, 2015).

In relation to realising the vision of becoming a regional education hub, the Malaysian government introduced two new projects that have been developed as education clusters. The first development is the Educity in Iskandar Malaysia, an economic free zone set up in the Southern Peninsular of Johor and the second is in Kuala Lumpur Education City (KLEC) – the integration of a commercial and residential project in the Klang Valley south of Kuala Lumpur. Many foreign institutions are invited to set up branch campuses in these two new education cities. The objective of developing these two education clusters is to accentuate the potential of Malaysia to become a regional

education hub (Welch, 2011; Wilkins & Huisman, 2015) that is largely driven by high student demand and superior infrastructure, coupled with the need to build a knowledge-driven economy to compete in line with other contending nations such as Singapore, Japan, Taiwan and South Korea (Ahmad & Buchanan, 2016).

1.7 Research Problem

Higher education institutions (HEIs) today are faced with continuous pressure in differentiating their courses and programs (Altbach, 2005) in order to avoid having their products perceived by consumers as close substitutes to other institutions. When an HEI is perceived as offering a close substitute, its profitability will suffer (Porter, 2008). To counter competition and achieve strategic competitiveness, HEI needs to distinguish its products from its rivals by providing a broad range of carefully differentiated programs. The key focus of a differentiation strategy is creating uniqueness along the dimensions that are different from rivals but which are valued by the market or customers (Mazarrol & Soutar, 2002; Ivy, 2008). While most HEIs understand the strong need to be equipped with unique market offerings, they face an underlying problem in implementing a comprehensive and practical strategy (Qiang, 2003). It is a challenging task to look from a holistic perspective, especially when international students come from different countries and socioeconomic backgrounds with different needs, wants and expectations (Wilkins & Huisman, 2011). Researching into the key factors influencing international students' decision-making in choosing private HEIs is vital for developing effective marketing and differentiation strategies.

This is particularly true for Malaysia, as given the small population the domestic market for higher education is rather limited and hence it is vital to expand its global market by recruiting international students (Cheng et al., 2013). Many HEIs are striving to expand into both the domestic and international markets, actively seeking global partnership opportunities, as well as enriching its modes of delivery (Cheng et al., 2013). Being a latecomer (in comparison to major hosting countries such as the US, UK and Australia) in an already competitive market, Malaysian HEIs will encounter significant challenges in order to meet the new targets (Migin et al., 2015). The Malaysian government, harbouring its ambition for the country to become an education hub, has a vision of achieving a target of 200,000 international students enrolled in its domestic HEIs by 2020. However, recent statistics on international student enrolments

as of 2017 revealed that Malaysia is not on track to meet this target (Ministry of Higher Education, 2018a). This could primarily be due to the decline in the three largest traditional sources of international students (Nigeria, Yemen and Iran) that used to provide almost half the foreign student population in Malaysia. In addition, there is lacklustre growth in students from other nations (Migin et al., 2015; Ahmad & Buchanan, 2016). As the higher education market becomes increasingly competitive and consumer-driven, higher education providers need to identify and understand the key factors influencing students' decision-making in choosing private HEIs. This can help HEIs to either promptly modify their current marketing strategies or to develop new marketing strategies in order to strategically position themselves in the market based on these factors (Simic & Carapic, 2008).

1.8 Research Gap

Research interests regarding international students in higher education have gathered momentum since 2006 as HEIs are increasingly dependent on international student enrolment to boost revenue, as well as help to compensate the progressive decline in public funding for higher education over the years (Abdullah et al., 2013). Most of the research on international students has focused upon developed countries. Abdullah et al. (2013), in their review of 497 journal papers on research studies conducted over the span of 30 years in higher education, found that 77.2% of studies published between 2006 to 2013 focused on developed countries, predominantly the US, Australia, UK, New Zealand and Canada, while only 10.9% of these studies focused on countries in the Asia region. With the escalating demand for higher education in Asia, more research attention to explore the Asia context is required. It is also apparent that most studies focused on the institutional level with an emphasis on the national level. Similarly, the use of samples from single institutions also leads to a debate that research outcomes cannot be generalised to a population of students from different HEIs (Kusumawati, 2013). Studies that are based on convenience samples from one subject discipline in one university further exacerbate the problem as the findings may turn out to be biased towards the specific strengths of the institution where the study is carried out. It can be argued that the results reveal more about that single institution and hence researchers should be cautious about the claims made (Hemsley-Brown & Oplatka, 2015).

The increasing view of regarding students as primary customers of HEIs (Kanji & Tambi, 1999; Eagle & Brennan, 2007, Brochado, 2009; Nicolescu, 2009; de Jager & Gbadamosi, 2013) has made students (mainly undergraduate and postgraduate students) the most popular subject investigated among the higher education studies. The research focus is, however, primarily on the motivational factors influencing the HEI's choice (Briggs & Wilson, 2007) with the influence of the choice of country often disregarded (Cubillo et al., 2006). Furthermore, prior research studies in this area have been selective in the coverage of key influencing factors for different countries, and the findings from these studies cannot be generalised to the Malaysia context (Oliveira-Brochado & Marques, 2007). International students come from different backgrounds and may not necessarily be influenced by the same set of key factors in their selection of Malaysia and its HEI for their overseas education over other countries (Cubillo et al., 2006; Bodycott, 2009; Roberts et al., 2010; Ahmad & Buchanan, 2016). Thus from the international students' perspective, existing literature leaves a research gap to continually update and search for a set of comprehensive influencing factors used, taking both country choice and HEI choice into consideration.

Student satisfaction, on the other hand, is another popular theme in international higher education research. These studies are usually carried out to exemplify the post consumption behaviour of students that is in relation to students' expectations and their perceived service performance of the HEI. The importance of understanding the satisfaction level cannot be undermined as evidence that when students are satisfied with the HEI's services, they become loyal to their institution. Arambewela and Hall (2003) identified a significantly strong relationship between satisfied students with positive word-of-mouth (WOM) and student retention. With positive WOM students are likely to recommend family members and friends to pursue higher education at the particular university that they are satisfied with (Slethaug & Manjula, 2012). Positive WOM not only improves students' retention but also leads to better branding for the university (Arambewela & Hall, 2003). This may improve the credibility and prestige of the HEI, which eventually grows the number of students (Marzo-Navarro et al., 2006).

The majority of student satisfaction studies in the past are conducted independently from research on motivational factors. These studies focus mainly on the students' in-

campus and academic experience; very little attention has been paid to the influence of the external environment on student satisfaction (Cubillo et al., 2006). Some researchers argue that international students' study experience is determined not only by their education experience but also other experiences, including their home life, jobs, relationships, security and meaningful community engagement, all of which are integral to students' wellbeing (Council of Australian Governments, 2010). An extensive survey on international student satisfaction conducted by the UK Council for International Education (UKCOSA) in 2006 concluded that whilst the large majority of international students seemed content with the quality of their course, they were less satisfied in relation to their overall student experience. This revealed that although the quality of education undoubtedly plays an important role in students' satisfaction (Mavondo et al., 2004), international students' satisfaction was not limited to merely academic needs but the entire living and learning experience (Chong, 2015).

The discussion above exhibits that despite a wide range of international student choice and decision-making research having been conducted, there are still gaps for further research. To better examine international student experiences, this study adopts a more holistic approach by looking into students' entire study, living and social lives within the academic and host country context. This includes investigating key influencing factors that international students rely upon for their choice of HEI to pursue their overseas education. This study then expands to measure international students' satisfaction towards the decision that they have made based on the key influencing factors. The relationship between satisfaction and future word-of-mouth behaviour in consumer referral is also being investigated in this thesis.

1.9 Research Questions

With a multi ethnic population of about 30.8 million, Malaysia has 659 HEIs and 509 of them are privately owned. The vast choices of HEIs make Malaysia a popular study destination among international students (Ministry of Higher Education, 2013). The direct competition within the higher education landscape in Malaysia prompts the HEIs to actively identify and understand the key factors that drive students' recognition of their own need for international education and influence their choices of study destination and type of HEI. This intense competition has prompted more research efforts to continually scrutinise areas such as 1) How decisions to study abroad are

made; 2) How decisions about the choice of country destination and HEI are made; 3) Are the decisions made under the influence of others? If yes, who are they? And finally; 4) Which factors influence international student satisfaction? More specifically, this study is driven to attempt and discover answers to the following:

- How do prospective students come to a decision to study abroad?
- How do they evaluate and select the study destination?
- What ultimately attracts international students to study in Malaysia?
- What are the push and pull factors behind the HEI choice?
- What ultimately contribute to a positive study experience at Malaysia private HEI?
- Which host country and HEI variables influence satisfaction?
- What is the relationship between this satisfaction level and international students' future behaviour in consumer referrals?
- Is there a difference between male and female international students in the perception of key factors influencing choice of private HEIs in Malaysia?
- Is there a difference among international students, across different types of private HEIs, in the perception of key factors influencing choice of private HEIs in Malaysia?

1.10 Research Objectives

The overarching aim of this study is to examine the key factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs. This aim leads to the following five specific objectives:

Objective 1: To identify the key push factors and key pull factors influencing international students' decision-making in choosing private HEIs in Malaysia.

Objective 2: To investigate the relationship between international students' study decisions and their satisfaction levels.

Objective 3: To investigate the relationship between international students' satisfaction levels and their future word of mouth behaviour in consumer referrals.

Objective 4: To determine whether there are significant differences in the perception of key influencing factors on decision-making between male and female international students.

Objective 5: To determine whether there are significant differences in the perception of key influencing factors on international students' decision-making according to the types of HEI (private university, foreign university branch campus, university college or private college).

1.11 Rationale and Justification of the Study

Malaysia has made international student recruitment one of the key initiatives in its latest education blueprint (Malaysia Education Blueprint (Higher Education) 2015–2025) with the ultimate goal of transforming Malaysia into an education hub. From the country's perspective, it is vital for the government to have a clear understanding of the key factors influencing students to study abroad and their choice of country destination. The pre-condition for an effective policy to develop Malaysia into an education hub that appeals to international students is a clear understanding of the underlying motives behind the latter's choice of country of study. The push factors are those that drive individuals to go abroad for their study and the pull factors draw individuals to Malaysia as the host country for their study. The distinction between the push and pull factors, as well as the identification of student satisfaction towards these factors, will enable government to identify destination attributes that are important and that appeal to international students, and thereby support the development of these attributes to better satisfy the target needs (Knight & Sirat, 2011). The study offers valuable information to the Ministry of Education in Malaysia for identifying and transforming its core strengths into competitive advantage and for competing more strategically in the region against neighbouring education hub competitors.

From the institutional perspectives, the immense options of HEIs in Malaysia create intense competition in the higher education sector. Private HEI providers in particular face overwhelming pressure in vying for international students. Their survival is dependent on possessing a clear understanding of the key factors influencing student choice of HEI to create competitive advantages that are unique, difficult to replicate, superior to competition and sustainable over time (Kotler & Keller, 2009). However,

students' decision to study abroad may constitute a complex process for the HEIs (Maringe & Carter, 2007; Kotler & Keller, 2009) because varying multiple factors could be involved in the students' decision-making processes (Wilkins & Huisman, 2011). Identification of the push and pull factors relevant in students' decision-making processes, as well as their satisfaction regarding these factors in this study, will help private HEIs understand how international students make choices and in return help these HEIs to craft a more effective international recruitment strategy (Dawes & Brown, 2001; Whitehead et al., 2006).

While HEI choice has been researched in the Malaysian context, a majority of the studies tend to focus on domestic students at Malaysian public universities instead of private institutions. There is a dearth in research on international students in Malaysia, and in particular, studies on educational choices for private HEIs of international students in Malaysia are under-researched (Padlee et al., 2010). Following the aim of the Malaysian government in transforming the country into an education hub, the current lack of research knowledge in key factors influencing international students' selection of a Malaysian HEI for their overseas education justifies the rationale of this study. This study considers a comprehensive set of key influencing factors that provides clear distinction of push and pull effects. This distinct segregation has not been captured by prior studies in the research context of Malaysia and in particular no prior research has been included to study and compare the four different types of private HEIs. This research investigates whether international students from the four different types of HEIs (private university, foreign university branch campus, university college and private college) in Malaysia are influenced by different key factors in their decision-making. Existing studies have focused on either private or foreign university branch campuses. Hence this research constitutes a pioneer attempt at identifying whether international students from different types of private HEIs in Malaysia are influenced by different key factors in their selection.

Similarly, research into the post-choice behaviour of international students is mainly restricted to satisfaction towards their HEI; very limited studies have talked about students' satisfaction with the study destination (Arambewela & Hall, 2008). International students' study experiences are critical in determining their future behaviour i.e. intention for future study and career decisions and even their willingness

to recommend the HEI to potential students. It is therefore important to determine the satisfaction or dissatisfaction level of international students regarding their decision to undertake overseas education in Malaysia during their study period. On the basis of this information, HEI administrators in conjunction with government authorities can identify which key features require immediate and ongoing attention to meet the perceptions and expectations of current and future international students for realising the country's vision of becoming an education hub. This study assesses the satisfaction level of international students towards the decision that they made based on the key influencing factors. Furthermore it investigates the relationship between this satisfaction level and their future word-of-mouth behaviour in consumer referral.

Another justification for this study includes the induction of a strong theoretical foundation as the conceptual framework, employing an integration of existing and prominent students' decision-making models that have been commonly but separately applied in research investigating students' choice of international education. Additionally a majority of these models were developed based on developed countries. The conceptual model in this study covers a comprehensive range of key influencing factors for understanding their impact on the decision, satisfaction and behavioural intention of international students from different types of HEIs in Malaysia, a context that is under-researched in extant literature. The distinction between the push and pull factors, as well as identification of student satisfaction towards these factors, will enable government to identify destination attributes that are important and appeal to international students, and thereby support the development of these attributes to better satisfy target needs. Similarly this information may provide insights for HEIs in designing highly differentiated products that meet consumer expectations.

1.12 Defining Key Concepts

This section presents the definition of key terminology used in this thesis. There has been a myriad of terminologies used by researchers and practitioners for the same identity or phenomena in the higher education field.

1.12.1 International Student

For example, 'international student' is the most widely used terminology to refer to 'an individual who is enrolled for credit at an accredited higher education institution on a

temporary visa, and who is not an immigrant (permanent resident), or an undocumented immigrant, or a refugee', as defined by (UNESCO). Interchangeable terms such as 'foreign student' and 'overseas student' have also been frequently used. In addition there are also colloquial terminologies used to refer to this group of individuals, such as: non-local students (Bodycott & Lai, 2012; Cheung & Yue, 2012); Asian students, mainly referring to the East and Southeast region of the Asian continent (Watson, 1998; Tani, 2008); and non-English speaking students (Marginson, 2011). The purpose of identifying and defining the key terminologies used in this study is to contribute to clear communication throughout the thesis. This study adopts the terminology 'international student' as suggested by (Roberts et al., 2010) as those who:

- 1) are citizens or permanent residents of a country other than Malaysia
- 2) have legal residence outside of Malaysia
- 3) are in Malaysia solely for educational purposes on temporary student visas.

1.12.2 Higher Education

According to MQA's classification, a higher education qualification covers certificate, diploma, undergraduate, as well as postgraduate levels (Malaysian Qualification Agency, 2018). The providers of higher education are colleges, polytechnics and universities. Undergraduate studies consist of bachelor degree levels and professional studies, while postgraduate studies consist of master's degrees and PhD levels (Malaysian Qualification Agency, 2018). For the purpose of this study, respondents are international students who are currently enrolled in any private HEIs for any higher education program.

1.12.3 Private HEIs

- **Private University:** Private institutions that award their own degree qualifications, diploma and foundation studies.
- **University College:** Private institutions that award their own degrees, but do not have university status. Like private universities, they collaborate and form alliances with other reputable foreign universities to offer a plethora of programs and courses.
- **Foreign University Branch Campus:** Branch campuses of foreign universities in Malaysia. They award degree qualifications that are identical to that of the host universities.

- **Private Colleges:** Private institutions that deliver professional programs mainly at certificate or diploma levels. They also establish twinning degree program arrangements with foreign-renowned universities.

1.13 Chapter Outline

This thesis consists of six chapters. Each chapter is briefly introduced before the main contents are previewed.

Chapter 1: Introduction. This is an introductory chapter that highlights the current issues and challenges faced in the higher education industry that are specific to the Malaysian context. Research problems are discussed and through the identification of research gaps, objectives of the study with intended outcomes are specified. Justification of the study explains the rationale about why the study was conducted. Chapter 1 ends by defining key concepts and terminologies used in the study.

Chapter 2: Theoretical background and conceptual framework. This chapter assesses existing empirical studies in order to provide the theoretical foundation for this thesis. The review of the literature covers a wide range of topics from students' choices and decision-making processes to satisfaction-related topics. The chapter commences with a discussion of higher education marketing, outlining service characteristics in higher education, as well as other relevant marketing implications. The chapter then critically reviews the existing models and theories in relation to student choice and decision-making. Next, the assessment of 30 empirical studies follows. Various influencing factors (influencing factors on the decision to study abroad, influencing factors for the study destination, as well as HEI choice) are presented. An assessment of third party influence and the gender effect are then discussed. A review of students' satisfaction and behavioural intentions follows. A critical review of past studies helps to conceptualise this study, and the SEM conceptual framework for this study is then presented. Chapter 2 concludes by outlining the research hypotheses for this study.

Chapter 3: Research methodology. This chapter presents the rationale for the research methodology used in this thesis. Details about the adopted methodology are presented in relation to justifying the entire research process. The chapter includes discussions

from the research design to the various procedures and methods used. The last part of this chapter addresses the ethical issues pertaining to data collection processes.

Chapter 4: Data analysis and results. Chapter 4 reports on the data analysis results and the outcomes are presented in four parts (Parts A, B, C and D). Part A is the descriptive analysis that highlights respondents' profiles. Part B discusses the four-step modelling process adopted in this thesis. Step 1 presents the outcomes for exploratory factor analyses (EFA). Step 2 involves specifying the one-factor congeneric models for each construct. Step 3 combines the one-factor congeneric models into multi-factor models. The final step (Step 4) is the presentation of the structural model of this thesis, as well as the results from hypotheses testing. Findings from this four-step analysis address research objective 1 and 2 in identifying the key influencing factors on affecting international students' decision-making as well as their overall study experience. Part C comprises of the results of cross-tabulation analysis which aimed at addressing research objective 3 in testing the relationship between respondents' satisfaction and their willingness to recommend. Finally, part D focuses on multi-group comparisons to test for gender effect, as well as differences between HEI types. The purpose of these comparisons is aimed at addressing research 4 and 5 of this thesis.

Chapter 5: Research Findings and Discussion. This chapter discusses the research findings based on the data analysis in Chapter 4. All findings are explained and compared to the previous literature. The chapter begins with an outline of the respondents' personal characteristics. Next, the research findings focus on addressing the primary aim of this thesis that is the key factors affecting international students' choice and decision-making regarding higher education in Malaysia's private HEIs. The discussion of key influencing factors is presented in the following sequence: push factors affecting international students' decision to study abroad, key influencing factors affecting international students' choice of private HEI in Malaysia: institutional pull factors and host country pull factors, information sources and third party influences, international students' satisfaction and their willingness to recommend their study experience through word of mouth. The final part of Chapter 5 explains the results of the multi-group comparison. The comparisons focus on identifying differences in relation to the perception of key influencing factors between male and female students, as well as their satisfaction level. Finally, findings on the comparison of different HEI

types are presented. Similarly the comparisons focus on comparing the perception of key influencing factors used by international students across different types of private HEIs in Malaysia.

Chapter 6: Conclusion and Future Recommendations. Chapter 6 is the concluding chapter. A summary of key findings of this thesis is first presented. The chapter then explains how each research objective of the thesis is achieved. Next, the chapter highlights the contributions of this study and justifies how this thesis is useful in shedding light for future research on international students' choice and decision-making of higher education at Malaysia's private HEIs. Research implications from both theoretical and practical perspectives are then outlined. Findings from this research provide two areas of recommendations for policy makers and HEI administrators or practitioners. The chapter then specifies the limitations of the study followed by recommendations for future research. The thesis ends with a concluding note from the author.

CHAPTER 2 THEORETICAL BACKGROUND AND CONCEPTUAL FRAMEWORK

2.0 Introduction

The research gap identified in the previous chapter (Section 1.8) generated this study for understanding the behaviour of international students in their choice of HEI and study destination by establishing a solid foundation within the extant literature for conceptualising the key influencing factors relevant to their choice and decision-making. The first section of the literature review highlights the marketing orientation in higher education. The next section examines the theoretical literature in regard to the complexity of students' decisions pertaining to overseas study. Subsequently various popular choices and decision-making models for international education will be discussed. The literature review then looks into the push-pull theory, tracing the theoretical and conceptual discourses in international student research. A detailed review of 30 empirical literature studies was subsequently conducted to examine the influencing factors of international students' choices and decision-making. The identification of influencing factors include the motivational factors for the decision to study abroad, influencing factors for HEI choices and study destination choices. The assessment of past literature also aims at exploring the effect of a third party influence such as parents, relatives and friends, education agents and recommendations from others. Evaluation of gender differences in students' choices and decision-making follows next. The final part of the literature review will look into issues pertaining to students' satisfaction and its effects in shaping international students' behavioural intentions – the word-of-mouth (WOM) effect in recommending their current HEI and the host country. The review of the literature forms the pathway leading to the conceptualisation of the model for this thesis in the final section of this chapter. The literature review provides a rationale of how the conceptual framework is developed.

2.1 Service Marketing in Higher Education

Higher education is widely regarded as a service despite attempts from opponents to portray it as a product or a business (Hemsley-Brown & Oplatka, 2006). A service is perishable, intangible and inseparable between production and consumption, and

heterogeneous in delivery (Stanton, 1974;Zeithaml et al., 1985; Kotler et al., 1995). Patterson et al. (1998) highlight that higher education requires a greater amount of interpersonal contact, complexity, divergence and customisation than other service businesses. Most of the quality attributes in higher education cannot be perceived, felt or tested in advance (Edgett & Parkinson, 1993). Higher education as a service is experiential (Lewis & Mitchell, 1990) and has very few tangible search attributes that can be evaluated before purchase. However service consumers do seek out tangible aspects when evaluating and comparing services from potential providers (Johns & Howard, 1998). These tangible aspects constitute key influencing factors for the consumers in distinguishing between services from competitors and selecting the competitor deemed to deliver the service that best meets their need. Higher education providers are pressured by market competition to adopt a consumer-oriented approach to understand the key factors influencing consumers' decision-making in choosing private HEIs in order to strategically position themselves in the market based on these factors (Lovelock & Wirtz, 2003; Altbach, 2005).

The essence of marketing a university lies in the service promised and the customer value perceived by the student (Kusumawati, 2013). The intangibility of services makes evaluation of a program and the HEI difficult because consumers usually associate intangibility with a high level of risk (Harvey & Busher, 1996; Patterson et al., 1998; Srikatanyoo & Gnoth, 2002). Intangibility also hinders the communication of services to the customer (Rathmell, 1966) and makes justifying prices for international higher education difficult (Mazzarol, 1998). Consequently, with higher education being bound by complex evaluation factors to consider, the decision-making of consumers is influenced by both direct and indirect mechanisms of service evaluation. In general, international students receive a pack of services (Zeithaml et al., 1985) comprising a core service, the main education qualification; some supporting services (Groenroos, 1978; Eiglier & Langeard, 1981; Normann, 1984), related to education activities at the host institution; as well as services that are available in the host country and the host city (Groenroos, 1994). According to Arambewela and Hall (2006), international students are likely to be satisfied with their experience of the core and main educational service provided by the institution but not be the case for supporting services. Prospective students will seek to analyse additional aspects such as accommodation, living conditions, the image of the country, safety, visa and entry requirements,

perceptions from the relevant public, cultural aspects and their personal values to provide clearer decision-making in selecting a host country and eventually an HEI within the host country (Lee, 2015; Cubillo et al., 2006). These services are attributes of the overall educational experience in a new country and are likely to play a significant role in enhancing or diminishing international student satisfaction (Oliver, 1997; Fournier & Mick, 1999; Rust & Oliver, 2000).

2.2 Students as Customers of Higher Education

There has been considerable debate in the literature regarding whether students are customers of an HEI (Eagle & Brennan 2007). Kanji and Tambi (1999) argue that as students pay for their education costs, being the direct and immediate consumer (Nicolescu, 2009) they should therefore be treated as any other purchaser of goods and services. This is supported by Brochado (2009) referring to students as the ‘primary customers’ of HEIs as they are the direct recipients of the services provided (de Jager & Gbadamosi, 2013). It is important for HEIs to develop marketing strategies that address the customers’ needs and preferences (Simic & Carapic, 2008; Ho & Hung, 2008). Understanding customers’ needs and preferences helps HEIs to refine their service offerings for competitive advantage, market positioning and marketing communication. It is thus crucial for HEIs to understand what students consider important and how these impact on their selection (Ahmad, 2006). With the right strategies, marketing can help HEIs in better promoting their advantages to their students (Americanos, 2011). By understanding the key influencing factors affecting international students’ choices, it prevents HEIs from establishing unrealistic expectations or offering promises that cannot be met (Kotler & Fox, 1995).

Bay and Daniel (2001) on the other hand argue that the student-as-consumer view is a narrow one that leads an institution to place a short-term focus on student satisfaction at the expense of the achievement of its longer-term educational and societal goals. Marzo-Navorro et al. (2005) and Maringe (2006) contend that other stakeholders should also be considered as being customers, including students, employers, families and society. Similarly Stensaker and D’Andrea (2007) believe that students are the primary customers while employers can be seen as secondary customers of an HEI.

Ng and Forbes (2009) adopt a more pragmatic position in which the authors state ‘regardless of what universities think students want, it is clear that the student is the consumer of higher education and students’ satisfaction in the consumption of a university experience is important’. In fact the intense competition has forced many HEIs to begin viewing students as customers and striving to strategically satisfy the needs of their students (Padlee et al., 2010; Lim, 2013). It is therefore pertinent and critical for HEIs to carefully strategise as well as plan the entire recruitment process (Chia, 2011). This begins with a thorough understanding of the key influencing factors in the decision-making process in order to recruit international students and cultivate satisfaction for positive word-of-mouth influence. This thesis takes the stance that students are the main customers of higher education despite other researchers adopting a broader definition of a customer in higher education.

2.3 Higher Education Institution Choice – A Complex Decision-Making Process

The student market is heterogeneous (Veloutsou et al., 2004; Bonnema & van der Weldt, 2008) and international students come from different backgrounds. There are various external factors involved in this decision that intensify the complexity of the decision-making process: high costs; away from home; the high expectations from their friends; and the pressure that is put on them by their family. The HEI selection process becomes more complex when a student decides to study abroad as compared to in their home country. When prospective students choose to study abroad, their decision-making process is not based simply on selecting a country and an HEI – there are many other considerations accompanied by expectations from themselves and from external parties, such as their parents and family and society (Lee, 2015). With extra pressure put on the student to make the best decision, students’ choice and the decision-making process is hence often regarded as a complex process (Moogan & Baron, 2003).

Similarly, Maringe and Carter (2007, p. 463) define student decision-making as ‘a multistage and complex process undertaken consciously and sometimes subconsciously by a student intending to enter higher education and by which the problem of choosing a study destination and programme is resolved’. The magnitude of the complexity is dependent on students’ search efforts and their ability to process data in a meaningful way (Kotler, 1975; Duan, 1997; Chapman, 1981). Kotler and Keller (2009) support these views and suggest that a student will generally pass through a decision funnel of

multiple stages before reaching the decision as to where to study. The higher education decision is frequently characterised as high involvement (Americanos, 2011) with a complex pattern of choice where students show different priorities and anxieties in relation to risks and challenges (Baker & Brown, 2007). The decision is characterised as a high involvement process because it is time and cost intensive and has high personal relevance to international students' decision-making (Gray, 1991). It is different to other service industries given overseas education is consumed for prolonged periods of time (i.e. throughout the duration of a degree) and has life-changing consequences, for example, the choice of an international educational institution has very important implications for the future career direction of the participants (Morrish & Lee, 2011). As stated by Moogan (2011, p. 572) 'the purchase of a higher education service equates to the promise of future benefit, but the exact rewards are not known at the start of this extended decision-making process with the perceived risk being very high for all those parties concerned'.

To minimise the uncertainty and reduce the perceived risk for the students, the institution's task is to determine what key factors students consider and how they weigh the relative importance of these factors (Moogan et al., 1999; Dawes & Brown 2005; Whitehead et al., 2006). By understanding these dimensions of decision-making and choice, the institution can be more effective in attracting and satisfying its students (Kotler & Fox, 1995). Insights from consumers may assist a country and HEIs in crafting a more effective international marketing strategy. Agreeing to the stance that understands how people make choices can contribute greatly to marketing efficiency. This thesis is specifically interested in investigating and understanding the key factors that influence international students' choices and decisions.

2.4 Theories and Models on Student Choice and Decision-Making

2.4.1 Student Choice Models

Student choice is a basic and integral part of theory and research in regard to the demand for higher education. Over the years various theories and models have been synthesised to study this complicated decision-making process (Vrontis et al., 2007). Students' choice models emerged in the early 1980s and most studies that have tried to understand the university choice process could be included in one of the following categories: economic model, status attainment model and combined model (Hossler et al., 1999).

These choice models help researchers to understand that decision-making for HEI selection is a complicated and lengthy process that is influenced by a diverse set of factors (Kusumawati, 2013). These models are related to many generic consumer behaviour and decision-making models in higher education related research.

2.4.1.1 The Economic Model

The economic model, also known as the human capital investment model, is derived from the classical economist model that suggests decisions are made in a perfectly and completely rational situation in every way (Lee, 2015). The economic model is principally quantitative and based on rationality assuming the decision-maker has a clear and well-defined goal prior to the purchase decision (Lee, 2015). The economic model assumes that students want to maximise their utility and minimise their risks. In other words, students' choice of a particular institution is based on the perceived benefits they are gaining (Vrontis, 2007). The greater the benefits, the higher the probability this institution will be chosen. Rational choices are made based on the information that is available to them. Kotler and Fox (1995) derived a comprehensive decision-making model fundamentally based on the economic model. The influence of the economic model can also be traced to a framework developed by Perna (2006) where the author depicts that students make their choice of HEI based on cost benefit considerations. The expected benefits, either monetary or non-monetary rewards, will be compared against the expected costs to attend the college. Meanwhile research by Crossman (2010) confirms again the importance of economic theory in shaping human behaviour. People will look into the possible costs and benefits before making a decision. The greater the economic returns, the more motivated people tend to consider the option (Crossman, 2010).

While the economic model reflects context-mediated motivations, it has limitations. Simon (in 1947 and 1957, cited in Lakomski & Evers, 2010) states that people's information processing ability is very limited by discrediting the notion of a perfect rationality and that a perfectly rational economic decision is unrealistic and impossible. According to Simon's bounded rationality theory (1978), individual decision-makers face constraints in cognitive ability as well as in time, effort and money to access all information required to make perfect rational and optimal decisions. The way to cope with the complexity of the world is to make decisions by constructing simplified models

that extract the salient features related to solving problems without capturing all their complexity. Simon (1978) maintained that decision-makers rarely optimise but look for a course of action that reaches their standard of satisfaction (known as ‘satisficing’ in Simon’s bounded rationality theory). Given the aforementioned constraints that inhibit accessing and digesting full and perfect information for an optimal decision, the decision-maker tends to select the course of action that they find satisfactory and acceptable although it may not necessarily be optimal. This course of action is considered a reasonable behaviour in bounded rationality theory. This study assumes bounded rationality in decision-making and focuses on investigating key influencing factors that international students rely upon for their choice of HEI to pursue their study abroad. Higher education as a service is experiential (Lewis & Mitchell, 1990) and has very few tangible search attributes that can be evaluated before purchase. This study also assesses the satisfaction level of international students towards the decision that they made based on the key influencing factors. Furthermore the study investigates the relationship between this satisfaction level and their future word-of-mouth behaviour in consumer referrals. The debate on rationality in the economic model further accentuates that the model in general overlooks the impact of internal dimensions, including individual socioeconomic background, personal characteristics, academic ability, and aspirations on students’ choice (Wu, 2014). Despite the constraints and debate, the economic model continues to be popular in student choices and the decision-making research.

2.4.1.2 The Status Attainment Model

The status attainment model (Hearn, 1984; Sewell et al., 1986) or the social model belongs to the discipline of social psychology and concentrates mainly on psychological and cognitive processes. This model is usually qualitative rather than quantitative (Lee, 2015). The status attainment model often sits at the other end of the spectrum from the economic model, rejecting the assumption that HEI choice is a rational decision (Raposo & Alves, 2007). Such models focus on how socioeconomic background (family status, academic ability) forms students’ educational aspirations (Sewell & Shah, 1978; Carter, 1999; Vrontis, 2007). The status attainment model also takes into consideration how sociological constructs of cultural (language skills, cultural knowledge and mannerisms) and social capital (social network) may influence students’ decision-making processes (Bourdieu, 1986). The model considers both

individual and social factors, which in turn allows a better access to explore the differences between criteria (Manski & Wise, 1983). The essence of the status attainment model has also been incorporated into many consumer decision-making models in more recent years. For instance, Kotler and Fox (1995), in their model, integrate social theory to explain the influence of family, social network and academic conditions in forming students' decisions.

2.4.1.3 The Combined Models

Some researchers suggest an integration of both the models will provide a considerable amount of analytical power, as they combine rational aspects of human behaviour with sociological perspectives (Rapose & Alves, 2007). These combined models include the key indicators from economic and social models in the choice selection process (Joseph & Joseph, 1998; 2000). There are a number of combined models but the more prominent ones are the following: the Jackson model (1982), the Hanson and Litten model (1982), the Chapman model (1984) and the Hossler and Gallagher model (1987).

2.4.1.3.1 The Jackson Model

The Jackson model (1982) suggests that a student goes through three stages prior to making a choice of HEI: 1) Preference; 2) Exclusion; and 3) Evaluation. Students' educational aspirations are formed during the preference stage and these aspirations are strongly linked to their academic achievement. Family background and the student's social context might influence these aspirations. Next, students go through a process of excluding some institutions from the prospective list. The exclusion process is dependent on the resources available to the student. Institutional factors, such as quality, fee and location, could result in the exclusion of a potential HEI. The final list of shortlisted HEIs is eventually formed after the exclusion. The final stage is when students evaluate and rate the remaining HEIs and make their choice (Vrontis et al., 2007).

2.4.1.3.2 The Hanson and Litten Model

The Hanson and Litten Model (1982) also has three stages: 1) Intention; 2) the Investigation; and 3) Application and Enrolment. There are five distinct processes that exist within the three stages that a student passes through: 1) Having college aspirations and deciding to continue post-secondary education; 2) Initiating the search process; 3)

Information gathering; 4) Sending applications; and finally, 5) Enrolling. There is a plethora of variables that affect college choice, which include: the student's family background, personal attributes, high school characteristics, and HEI characteristics, to name a few (Vrontis et al., 2007).

2.4.1.3.3 The Chapman Model

The Chapman model (1984) suggests that student characteristics, along with external influences, form a student's general expectations of college life. Student characteristics include socioeconomic status and scholastic aptitude (academic performance and educational aspirations), while external influences include significant others (parents, friends and high school personnel) and college characteristics (cost, location, program and the HEI's marketing efforts). The Chapman model separates the student's choice into the pre-search and search stage. Family income directly impacts on the type of HEI considered during the pre-search stage. In addition, students are in favour of the HEI that matches their academic ability (Chapman, 1984). After the initial considerations, students then proceed to gather information about specific institutions (Vrontis et al., 2007).

2.4.1.3.4 The Hossler and Gallagher Model

Similar to most choice models, the Hossler and Gallagher model (1987) also has three stages: 1) Predisposition; 2) Search; and 3) Choice. This model describes students' choice in a sequential phase, and begins with the decision to continue for higher education, engaging in an HEI search process before ultimately choosing an HEI. Motivational factors for students to continue with their post-secondary education include socioeconomic, economic, societal, and the attitudes of others (Hossler & Gallagher, 1987). Once the intention is formed, students then proactively search for institutions during the next phase. At the search stage the student's interests and concerns towards the institution might vary. The choice and decision is completed when the student decides which institution to attend (Chia, 2011).

2.4.1.4 Criticism of the Combined Models

The combined models presented in Section 2.4.1.3 allow the researchers to identify key influencing factors in the international student selection process from both economic and social perspectives (Rapose & Alves, 2007). A key commonality among these

models is the three-stage process (1) Intention formed; 2) Selection process; 3) Evaluation prior to making a choice. On the other hand, a key disparity among these models lies in the differences in the factors impacting the students' intentions at different stages (Joseph & Joseph, 2000; Vrontis et al., 2007; Fernandez, 2010; Khairani & Razak, 2013). Although many researchers agreed on the usefulness of the three-stage approach of these combined models in HEI choice, these models have shortfalls.

According to Vrontis et al. (2007), the Hanson and Litten model (1982) is a cross between the Jackson model (1982) and the Chapman model (1984). The former is more a student-centred model while the latter emphasises institution-based variables (Hanson & Litten, 1989). In the Jackson model, situational factors play a significantly smaller role than sociological factors such as family background, academic achievement, aspiration and resources in the student's preference towards a particular HEI. The model is commonly criticised for not explicitly explaining how the initial institutional sets are formed (Vrontis et al., 2007; Kusumawati, 2013). On the other hand, the Hanson and Litten model (1982) proposes a plethora of situational factors ranging from student characteristics to cultural factors, environmental factors to college characteristics. Some of the factors found in the Hanson and Litten model (1982) also appear in the Chapman model (1984); for instance, socioeconomic status, students' performance, parents and peers, admission policies and programs.

The Urbanski model (2000) proposed a university choice model based on predisposition, an information search and a choice process that is similar to the Hossler and Gallagher model (1987). The Perna model (2006) explains how economic, sociological, cultural, policy context and demographic factors shape students' choices. The model depicts that students make their choice of HEI based on cost benefit considerations. The expected benefits, either monetary or non-monetary rewards, will be compared against the expected costs to attend the college. In addition to that, sociological and cultural factors might also affect students' final choice throughout the selection process.

In another study, a group of researchers, Vrontis et al. (2007), have developed a comprehensive and more user-friendly student choice model by integrating the Hanson

and Litten model (1982), the Chapman model (1984), and the Jackson model (1982). By putting together different perspectives, these researchers aim at providing a more descriptive contemporary student choice model specific to the context of developed countries. On the other hand, the Radford model (2009) extended the Urbanski model (2000). These studies explained how students choose their desired HEI, which usually involves a complex and multifaceted process.

2.4.2 Consumer Decision-Making Models (CDM)

The consumer decision-making (CDM) models or the consumer behaviour models are newer and more comprehensive models in the higher education research to predict the complex decision-making process of students. The CDM model is a theoretical model used to understand consumer behaviour and the causal factors that lie beneath it (Blackwell et al., 2001; Vrontis et al., 2007). These models are derived from the consumer behaviour theory that rests at the foundation of modern marketing philosophy. Blackwell et al. (2001) define consumer behaviour as the activities people undertake when obtaining, consuming, and disposing of products and services. Blending elements from the economic and social attainment models, CDM models claim to be more user friendly and provide a pragmatic view to marketers for better predicting the decision-making flow by students (Lee, 2015). This philosophy recognises that for business to be successful, the formulation of marketing strategies should be centred on consumers' needs and wants (Schiffman & Kanuk, 2002). A number of generic CDM models have been developed by various researchers over the last two decades (Lee, 2015).

2.4.2.1 Stages in the CDM Model

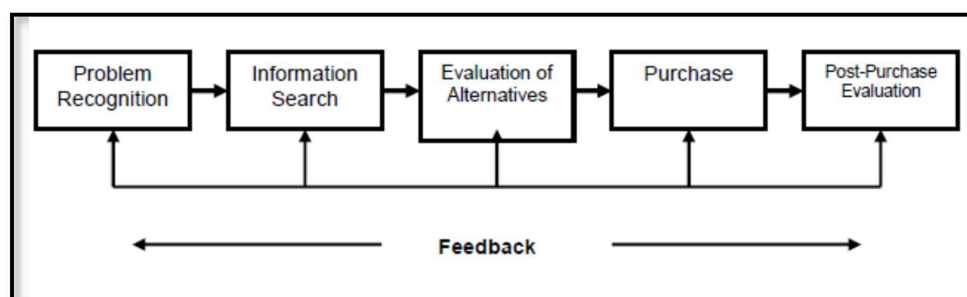


Figure 2.1 Generic consumer decision-making model (Kotler, 1997)

The consumer decision process includes the mental and physical steps taken by the consumer from the point of need recognition to post consumption (Blackwell et al., 2001). The majority of CDM models explain the consumer decision process in five sequential stages (see Figure 2.1) namely: 1) Problem recognition; 2) Information search; 3) Evaluation of alternatives; 4) Purchase; and 5) Post purchase evaluation (Du Plessis et al., 1991; Kotler & Fox, 1995; Kotler, 1997). The classification of these stages of consumer decision-making has been and still is widely used to explain consumer behaviour (Lee, 2015).

Stage 1 – Problem Recognition

Problem recognition is when international students recognise the need to continue their post-secondary education. A combination of individual and environmental factors might trigger this initial stage. For example, students may plan for a better future and prospective careers, or it can be simply pressure or expectations from parents, family or friends (Kotler & Fox, 1995). Many students may seek higher esteem or self-improvement opportunities through overseas education (Pyvis & Chapman, 2007). Other factors include students' perceptions that overseas education is better than the local one or it may be due to the failure of gaining entry into local institutions (Mazzarol & Soutar, 2002).

Stage 2 – Information Search

Following the problem recognition, students will start to proactively search and gather information (Schiffman & Kanuk, 2000; Blackwell et al., 2001; Kardes et al., 2011). The intensity of the search depends on the urgency, cost, complexity of product/service, subjective estimation of value and other factors. Information may be obtained from various sources, internally from within their memory and/or externally from outside (Moogan et al., 2001). Students generally seek basic and factual information pertaining to the country, institution and particular course from other external sources. This information is usually communicated to them directly from the HEI or other marketing channels through admission/recruiting activities (Chapman, 1981), pamphlets and prospectuses, school counsellors, college representatives, education agents (Isherwood, 1991) and the internet (Gray et al., 2003; Cheung et al., 2011). However it is evident from previous studies that opinions and recommendations from family, friends or reference groups are more influential compared to the traditional

marketer dominated channels (Vrontis et al., 2007). Binsardi and Ekwulugo (2003), in their study, found similar outcomes regarding the influence of alumni, friends and relatives in relation to international students' decision-making for UK HEIs.

Stage 3 – Evaluation of Alternatives

Upon obtaining information from various sources, students form a preference set of potential institutions (Kotler & Fox, 1995); they then compare and evaluate the options and information obtained (McCall et al., 2002). At this stage significant differentiating characteristics (Vrontis et al., 2007) may make one institution appear more attractive than another. Students may form different evaluation criteria, as their considerations for country and HEI choices are based on many personal motivations accompanied by social expectations from external parties. This may result in different evaluation outcomes subjective to individual student's needs and wants (Lee, 2015). Differentiating characteristics become essential at this stage to attract prospective students. Institutional characteristics, such as image, reputation, quality, programs, fees, location and facilities will be compared (Lee, 2015). However, consideration is also bound to the reality on which institution(s) may offer a place to the student (Kotler & Fox, 1995).

Stage 4 – Purchase

At the purchase stage the student will make a decision about choosing the institution that best matches their criteria. At this stage judgement might be again under the influence of others, such as parents, friends or alumni (Mazzarol & Soutar, 2002; Pimpa, 2002).

Stage 5 – Post Purchase Evaluation

Students will form a perception towards the service quality received after enrolling in the institution in which they compare with their expectations. If service quality falls below students' expectations, dissatisfaction occurs or vice versa (Kotler & Fox, 1995). Similarly, students' perception regarding their study destination might contribute to their overall overseas education experience (Buddhichiwin, 2013). The students' satisfaction level might influence their future behaviour. They may drop out of the institution prematurely and be reluctant to recommend the institution to others (Kotler & Fox, 1995; Baek & Shin 2008; Childers et al., 2014). The willingness to recommend

or the word-of-mouth (WOM) is an interpersonal communication that has significant impact on consumer behaviour. Previous studies have evidently proven the WOM effect as an important source of information for international students (Petruzzellis & Romanazzi, 2010; Bruce & Edgington, 2008; Prugsamatz et al., 2006; Mangold et al., 1999). Researchers discovered that recommendations from others, in particular parents and other family members, have significant impact on students' choice and decision-making (Pimpa, 2002a, 2003, 2005).

2.4.2.2 Criticism of Consumer Decision-Making Models

Customers' influence on business has grown tremendously over the past decades, empowering them to be a dominant force in shaping the business environment. The more consumer knowledge a business possesses the easier to predict and understand consumer behaviour. Understanding how consumers make decisions will reveal details on the five 'W' questions: Who are the customers? When do they buy? What do they buy? Where do they buy? And how do they pay? (Vrontis et al., 2007)

Over the past years, various CDM models have been synthesised to scrutinise this complex behaviour. Researchers developed or modified their models fundamentally based on the generic five-phase structure. The more recent and popular CDM models include Blackwell et al. (2001), Schiffman and Kanuk (2007) and Kotler and Keller (2009). The variations of the newer models compared to the original include having lesser or extra stages, and/or using a different term or classification to describe each stage (Lee, 2015). Blackwell et al. (2001) have two extra stages in their CDM model, namely divestment and dissatisfaction. In the Kotler and Keller (2009) model, the authors suggest that a student will generally pass through a decision funnel of five stages before reaching a decision as to where to study. Despite the disparities, such CDM models are typical representations of rational interpretation to the complex, multistage consumer decision-making process (Blackwell et al., 2001; Schiffman & Kanuk, 2007; Kotler & Keller, 2009).

There are researchers who argue that the CDM model is too simplistic and idealistic (Lee, 2015). The model is criticised for its broad structure reflecting only basic decision-making (Erasmus et al., 2001). The CDM model ignores the fact that at any given phenomenon or context, the decision-making process might be influenced by

countless external factors that are different (Schiffman & Kanuk, 2000). The other critique is that the CDM model is said to be too idealistic for assuming rational decision-making (Soloman, 1996). It is possible for customers to engage in unconscious behaviour during their decision-making process. Many consumers undertake little or no effort prior to the consumption of products or services (Soloman, 1996; d'Astous et al., 1989).

2.4.3 The Push-Pull Theory

The push-pull theory was initially deployed to investigate migration-related issues (Lee, 1996) before it was widely used to research international students' mobility. The history of the push-pull theory can be traced back as early as the 19th century when Ernst Ravenstein (1885) published 'The Law of Migration' in the Journal of the Statistical Society, where the author suggested that migration is governed by a set of 'push and pull' processes. Push factors are adverse factors that cause people to relocate or move away from their current situation. On the opposite end, pull factors are favourable factors that attract people to moving to the new place (Dorigo & Tobler, 1983). In other words, causal effects of push-pull factors help to determine the size and direction of migration flows (Portes & Borocz, 1989).

McMahon (1992) was among the earliest researchers to adopt the push-pull theory to investigate international students in the USA during the 1960s and 1970s. The push-pull theory has been used extensively in international student mobility research, exploring students' migration patterns (Altbach, 1991; Mazzarol & Soutar, 2002). In the context of international student mobility, push factors refer to the home country's adverse situation in initiating a student's decision to study abroad (Gatfield & Chen 2006). By contrast, pull factors are often associated with the attractiveness of the host country and institutional features or attributes (Mazzarol & Soutar 2002; Wilkins et al., 2012).

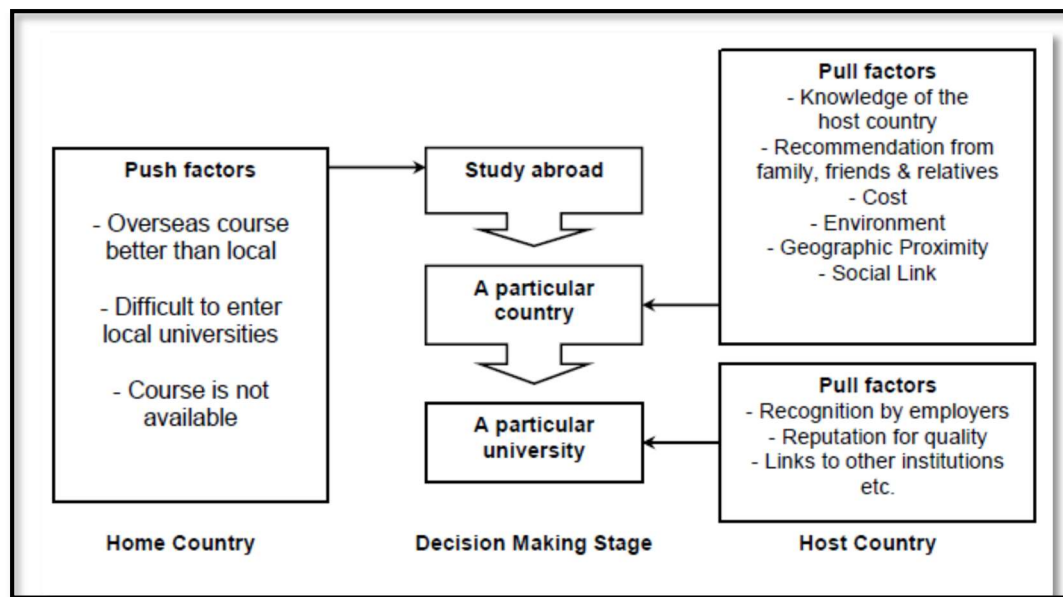


Figure 2.2 Push-pull model (Mazzarol & Soutar, 2002)

Similar to most combined models, the push-pull theory depicts the students' decision-making process in three stages (see Figure 2.2), and begins with 1) the decision to study abroad; 2) followed by deciding the study destination; and 3) finally selecting the desired HEI (Chen, 2007). The intention to study abroad may be formed under a series of push factors (aroused by both internal and external factors) within the home country. Push factors usually refer to negative conditions caused by the adverse political and/or economic conditions of the origin country (Chen, 2007). Once the intention has been developed, the next phase involves selecting the host country. In this phase, pull factors (a wide range of country factors) might make one country more attractive than another. For instance, country pull factors may include the country's image, culture, language, political stability, cost of living, proximity, visa processing and migration matters (Mazzarol & Soutar, 2002). The third stage is when students choose a desired institution. At this stage, a variety of additional pull factors (a bundle of institutional factors) differentiate one institution from another. Pull factors are usually positive and attractive (Mazzarol & Soutar, 2002; Chen, 2007; Maringe & Carter, 2007; Llewellyn-Smith & McCabe, 2008). In fact, Singh et al. (2014) in their study identified that pull factors are in many ways more significant in affecting students' choice than push factors. Examples of institutional pull factors include: the institution's image, reputation, quality, programs, fees, location, employment, environment and facilities.

A number of previous studies have used the push-pull theory as a mechanism to understand international student decisions (McMahon, 1992; Mazzarol & Soutar, 2002; Binsardi & Ekwulugo, 2003; Maringe & Carter, 2007; Bodycott, 2009; Cheng et al., 2013; Zheng, 2014). From the push factor perspective, it reveals some hindsight to the home country government as to why students favour one study destination over another. Governments may work towards fixing the weak attributes of their country to improve their home market attractiveness and to reduce the outflow of local students (Ahmad & Buchanan, 2015). From the pull factor viewpoint, understanding factors that appeal to students help the host country and its HEIs to craft a more strategic international recruitment strategy. Some researchers have expanded the push-pull theory to suggest that individual institutions should have their own set of pull factors to differentiate themselves in the market (Mazzarol & Soutar, 2002; Maringe & Carter, 2007). The push-pull theory is said to provide a holistic and undisturbed view of international student mobility patterns and trends (Lee, 1966; Portes & Rumbaut, 1990; Cinel, 1991).

2.4.3.1 Criticism of the Push-Pull Theory

Despite the popularity of the push-pull framework (Li & Bray, 2007), this theory has been criticised for its overemphasis on external forces that impact on students' choices and neglect personal factors. Different students may react differently towards push and pull factors based on their personal and sociological backgrounds, such as individual preferences and characteristics, socioeconomic status, gender, motivations and aspirations, and it is important to take these factors into consideration in understanding students' choice of HEI for studying abroad (Wilkins et al., 2012). Pimpa (2002a) further criticised the over-simplistic nature of the push-pull theory for having only 3 stages (the decision to study abroad, choice of country and choice of HEI). The author argues that the selection of courses and city are equally important and should be incorporated into the framework.

2.4.4 Summary of Models and Theory on Students' Choice and Decision-Making

A few observations can be drawn from the discussion above:

- International students' choice and decision-making for overseas education is indeed complex.

- Most students' choice model is derived from the economic or sociological theoretical perspectives and the newer models combine both perspectives in explaining students' choice and the decision-making process. The students' choice model tends to end when a choice is made (i.e. after students send their application/enrolment to the HEI), while the CDM model looks into post purchase behaviour, assessing the satisfaction level.
- Mostly the students' choice model and the CDM model were originally designed based on the developed countries' contexts, particularly the US, UK and Australia, which have been dominant players in the international student market. Both the students' choice model and the CDM model have been widely adopted in international higher education research. Many studies have modified and expanded these models to adapt to their particular research context.
- There is a plethora of factors identified from these models in regard to students' choice and decision-making. These factors can be broadly categorised into personal, home country, host country, institution, third party and satisfaction-related dimensions. Each category of factors may be applied to explain a different stage of the students' decision-making process. Some factors overlap and contradict in demonstrating the complexity of international students' decision-making process.

Linking back to this study, the students' choice models and CDM models discussed above help to form the theoretical foundation of this thesis which will be discussed in the conceptual model (Section 2.9). The push-pull theory will then be mapped to explain the underpinning reasons of how complex choices are made in regard to overseas education. The primary research goal of this thesis is to examine the key influencing factors of international students' choice and decision-making in regard to their overseas education; these models and theories provide better hindsight on explaining their behaviour.

2.5 Empirical Studies on Students' Choice and Decision-Making

The review of the models and theories on students' choice and decision-making in previous sections affirms that choices pertaining to overseas education are usually complex (Baker & Brown, 2007). There are numerous intentions that motivate students to study abroad, and likewise there is also an abundance of factors that influence international students' choice of HEI and country destination. In the next section, the study reviews thirty empirical research studies conducted over the past 15 years (2002–2016) pertaining to students' choice and decision-making. Fifteen of these were conducted in an international context (foreign countries) while the rest were based on local (Malaysia) settings. These studies differ in terms of research types and purposes, the methods and techniques adopted, and the samples. Some of these studies involve international students as well as a comparison of different institution types that are the areas of interest of this study. The review of the literature tends to exemplify the similarities and differences of opinion pertaining to students' choice and decision-making. Due to differences in the context of these studies, not all findings are directly comparable to each other.

The assessment of empirical research begins with an exploration of students' motivation to study abroad (push factors), followed by a discussion on the factors influencing the choice of study destination, as well as the institution (pull factors). A plethora of factors has been identified from the review of past literature. Push factors that initiate students' intention to study abroad include: employer's recognition, limited accessibility to higher education, political/economic stagnation, international experience, perceptions that overseas education is better, better future career prospects and advantaged position. Host country related pull factors include country image cultural/religious diversity, political stability and safety, cost of living, language commonality, location/proximity, visa processing/migration opportunities and social experience in general. Meanwhile, HEI-related pull factors are: HEI image, reputation and recognition, strategic links and alliance, teaching and learning quality, programs and courses, entry requirements, location, future employability, and campus facilities/environmental traits.

The analysis is then followed by an inspection of the information source used by respondents and the role of the reference group/influencers in students' decision-making (third party influence). In addition, the assessment also takes account of the demographic effect (gender). The review of these thirty literature papers then ends by looking at satisfaction-related dimensions (determinants of perceptions/satisfaction factors). This includes the examination of students' satisfaction as well as their future behaviour such as their willingness to recommend through word-of-mouth (WOM).

2.5.1 Factors Influencing Decision to Study Abroad

The decision or the motivation to study abroad as discussed in the empirical studies can be influenced by personal (internal) or external factors.

2.5.1.1 Limited Accessibility to the Home Country's Higher Education System

Some researchers acknowledged that it is the conditions within the home country that 'push' the students' intention to study in another country (Mazzarol and Soutar, 2002). This has been the most frequently mentioned external reason causing students to leave their home country for international education (Mazarrol & Soutar, 2002; Maringe & Carter, 2007; Bodycott, 2009; Trahar, 2014; Ahmad & Buchanan, 2015; Lee, 2015; Kaur, 2016; Oliveira & Soares, 2016). The adverse conditions include limited accessibility to higher education opportunities as a result of political and/or economic stagnation. Maringe and Carter's (2007) study on African students' motivation in UK universities affirmed that the lack of higher education capacity due to adverse political and economic conditions was the main push for the students to escape from poverty or political crisis in the African region. In a recent study by Oliveira and Soares (2016), the authors discovered that the lack of higher education opportunities, as well as political and social turmoil in the home country motivated international students to study in Portugal.

2.5.1.2 Personal Development and Experience

The top motivations that inspired the students' decision to study abroad include the pursuit of international experience and better career prospects in the future. In a cross-country (Taiwan, India, Indonesia and China) study conducted by Mazzarol and Soutar (2002), the authors identified that the intention to experience a different culture and to

increase future migration opportunities were among the key push factors influencing students' decision to study abroad. Meanwhile a study conducted with 251 Mainland Chinese students and 100 parents by Bodycott (2009) discovered different perspectives drive students to study outside of China. While the parents perceived that the attainment of an overseas higher education qualification could enhance their children's access to job opportunities and future migration prospects; the students on the other hand emphasised international experience and a higher quality of education as motivations for overseas education. In a separate study on Mainland Chinese students by Wu (2014), it was found that the desire for cultural enrichment, experiencing a native English environment, career betterment, personal growth and development motivate them to study in the UK. Wintre et al. (2015) study conducted on 64 international students in Canada also assumed their English skills would automatically improve during their overseas study in an English language environment.

In regard to research conducted in the Malaysian context, only two (Pyvis & Chapman, 2007; Fernandez, JL, 2010) out of the fifteen literature reviews (Padlee et al., 2010; Lim et al., 2011; Baharun et al., 2011; Koe & Saring, 2012; Cheng et al., 2013; Khairani & Razak, 2013; Zain et al., 2013; Singh et al., 2014; Trahar, 2014; Lee, 2015; Ahmad & Buchanan, 2015; Migin et al., 2015; Kaur, 2016) discussed personal motivation factors influencing students' choice and decision-making of HEIs. Based on the study conducted by Pyvis and Chapman (2007) in an offshore Australian university campus in Malaysia, the authors discovered distinct motivations between the local and international students in their choice of HEI. Future job prospects were valued more by the local students than the international students. The latter primarily prefer an international experience and personal development in an international environment.

2.5.1.3 Perceptions of the superiority of overseas education

It is also a popular belief that a candidate with an overseas degree may enjoy greater job and life opportunities (Padlee et al., 2010). Students assume leadership positions upon obtaining their qualification and returning to the home country (Maringe & Carter, 2007). Wu (2014) discovered that it is the career success that affects students' perceptions of overseas degrees. Students believed that they would be treated better at the workplace

than graduates with local qualifications. Similarly respondents in Wintre et al. (2015) study also perceived an overseas qualification to have higher quality than a local qualification. Some researchers however suggest that it is the employers' recognition of foreign qualifications that 'push' students' desire for overseas education as foreign qualifications often equate to better quality (Mazarrol & Soutar, 2002; Cubillo et al., 2006; Pyvis & Chapman, 2007).

Based on the above discussions, the reason for studying abroad is indeed multifaceted and underlined by a number of influencing factors. The desire for personal development, perception of higher quality overseas education, and limited places at the home country's HEIs to pursue a higher education have been the common factors from previous studies conducted on students' decision-making in regard to the choice of HEI for their overseas study. Once the intention to study abroad is formed, students will then decide on their desired study destination, as well as choosing a preferred HEI from a plethora of choices available. This study adopts a myriad of different factors from these literature reviews and the following sections will discuss the influencing factors that might potentially have an impact on students' decision-making in regard to the choice of country destination and HEI for their overseas study.

2.5.2 Factors Influencing Choice of Study Destination

Thirteen out of the thirty empirical research reviews tested the impact of study destination characteristics in affecting students' choice of higher education. Among these, four of the literature reviews had focused solely on research on country-specific characteristics. These studies scrutinised the different aspects and dimensions of country features that students may find attractive that eventually led them to choose that specific country.

2.5.2.1 Cost

The most commonly identified reasons for choosing a particular destination were cost factors, country image, cultural diversity, political stability and safety, location and proximity. The cost factor, a top influencing factor, has been cited in more than half of the literatures (Mazarrol & Soutar, 2002; Pyvis & Chapman, 2007; Americanos, 2011; Chia, 2011; Lim et al., 2011; Koe & Saring, 2012; Wintre et al., 2012; Cheng et al., 2013;

Kusumawati, 2013; Singh et al., 2014; Trahar, 2014; Wu, 2014; Zheng, 2014; Wintre et al., 2015; Ahmad & Buchanan, 2015 and 2016; Kaur, 2016; Oliveira & Soares, 2016) as a consideration of students when choosing where to study. Mazzarol and Soutar (2002) found that students took into consideration the direct and indirect cost of international education. According to the authors, direct cost is associated with the cost of tuition fees, travel costs, living costs and expenses while the indirect cost is associated with the opportunity of working a part-time job compared to studying in the home country. Americanos (2011) in his doctoral thesis on the factors influencing international students' decision in choosing an HEI in Cyprus also found that the low cost of living and the availability of well-paid part-time jobs are factors that attract international students. In fact the author found that a majority of the students in his study expected to earn a living while studying in Cyprus. Wintre et al. (2015) study reveals financial considerations as the foremost consideration for international students studying in Canada. The cost of study, in particular a lower tuition fee compared to other popular study destinations such as England and United States, was the attraction for these students to study in Canada. The respondents in the Oliveira and Soares (2016) study take into account the availability of scholarships from overseas HEIs to subsidise the cost of study in their decision-making process.

The cost factor also emerged as a key influencing factor in previous research studies on international students in Malaysia. For instance, in a pilot study conducted by Lim et al. (2011) involving international students from Middle East countries and China, tuition fees, travel costs and cost of living were consistently regarded as important by both groups of students. Singh et al. (2014) in a similar context compared the difference in factors influencing their choice of Malaysia as a study destination between Middle Eastern students and Asian students. Both groups of students identified cost (affordable cost of living and reasonably low tuition fees) as the third most important influencing factor in their choice. Likewise Kaur (2016) also agreed that the comparatively low living costs and tuition fees were key influencing factors for international students studying in Malaysia. The respondents in her study found that the cost of education in Malaysia was much lower compared to USA, Britain and Australia. Other empirical studies in support of this positive relationship between low cost and students' choice to study in Malaysia

included Pyvis and Chapman (2007), Koe and Saring (2012), Trahar (2014), and Ahmad and Buchanan (2015) and (2016).

2.5.2.2 Host Country Image

Host country image is another key influencing factor in most studies. Country image refers to the reputation or the stereotype attached to a specific country (Al-Sulaiti & Baker, 1998). For example, a consumer may use country image as a heuristic to determine the quality of a product/service and forms stereotypical opinions about that product/service based on its origins. Mazzarol and Soutar (2002) and Maringe and Carter (2007) argued that country image is one of the important factors in deciding the study destination as it helps to reduce purchase risk. The researchers found that students have a tendency to be influenced by the reputation of the country in providing high quality education or profile of the country in selecting a host country as their study destination. Mazzarol and Soutar (2002) claimed that students are more likely to choose a study destination they are well aware of and familiar with. To accentuate their argument, the authors gave an example in explaining USA has been a top study destination due to the popularity of the country. Maringe and Carter (2007) discovered that African students choose to study in UK because of the high quality and international recognition of UK qualifications. The students see the obtaining of a UK degree as a life-time investment and opportunity, as the qualifications are highly regarded everywhere in the world.

Wu (2014) is in accordance and also affirmed that UK was preferred by Mainland Chinese students because it has a good reputation for quality education. Students felt that British universities often had superior teaching systems, whereas the teaching and learning methods in most Chinese universities were old-fashioned. They wanted to experience better learning opportunities. In addition, broad recognition of British qualifications in China provides an advantage for career growth for students when they return home. Likewise in Canada, Wintre et al. (2015) also discovered that international students chose to study in Canada for similar reasons. Students perceived the Canadian education system with its advanced learning processes to be better quality than their home country. Pyvis and Chapman (2007) on the contrary suggested that the high demand for Australian offshore education was due to the students' recognition of its superior quality education.

Their study discovered that international students chose an offshore Australian university in Malaysia mainly because they wanted an overseas qualification. Lim et al. (2014) study however revealed that Chinese students chose Malaysia because they perceived the country as exciting and fun to live in with a comfortable climate rather than its image as a quality education destination.

2.5.2.3 Host Country Social and Cultural Diversity

Cheng et al. (2013) advocated that the cultural diversity in Malaysia has added a niche advantage to the country. International students preferred Malaysia, as there is a diverse community of international students from different countries, low discrimination and the non-existence of a language barrier. These have been the pull factors attracting international students to Malaysia. The authors also highlighted that in being an Islamic country, Malaysia attracts international students from other Muslim countries. Singh et al. (2014) supported this finding that sharing the same religion was a major driver for Middle Eastern students to study in Malaysia. A number of researchers (Trahar, 2014; Ahmad & Buchanan 2015; and 2016; Kaur, 2016) also agreed that being an Islamic nation has made Malaysia a more attractive study destination. Kaur (2016) revealed that cultural familiarity, in particular the sociocultural and linguistic similarities, attracted international students from China, Singapore, Thailand, Middle East and Indonesia to Malaysia. Indonesian students, for instance, have selected Malaysia mainly because Indonesian languages are widely understood in Malaysia. These students also regarded Malaysia as having a good learning environment where Malaysians are friendly and English is widely spoken in the country (Ahmad & Buchanan, 2016).

2.5.2.4 Host Country Political Stability and Safety

Political stability, in particular the safety and security aspect, has also been regarded as a pull factor attracting international students to a country. Political stability refers to the safety within a country and is often associated with country image. Bodycott (2009), for instance, demonstrated that when selecting a country destination, Chinese parents had a tendency to take into account the level of crime and attitude of locals towards foreigners. Chinese students in contrast did not rate safety and security at the same level of importance as their parents. In regard to safety and security concerns, Malaysia has

always been considered comparatively safe and politically stable, with a relatively low crime rate (Fernandez, 2010). The image of Malaysia as a safe study destination was boosted when the Global Peace Index (2015) ranked Malaysia as the 28th most peaceful country. The relatively high ranking further emphasises that Malaysia is a safe and peaceful country. Global GPI ranks nations of the world according to their level of peacefulness based on 3 criteria: safety and security in society, the extent of domestic and international conflict, and the degree of militarisation. Singh et al. (2014) discovered that Middle Eastern students preferred Malaysia because they perceived Malaysia to be a safe and peaceful place for overseas study. Likewise Kaur (2016) and Ahmad and Buchanan (2016) affirmed that a safe environment and political stability have attributed Malaysia as being a popular study destination in South East Asia.

2.5.2.5 Host Country Location and Proximity

The next factor that may have an impact on students' choice of where to study is the location and proximity of a country. Findings from research studies did not reveal a unanimous outcome on location and country proximity as having a significant influence on students' choice of location for overseas study. Wu's (2014) study, conducted on Mainland Chinese students, identified that location mattered when choosing which city to study in, in Britain. The choice of city location is highly correlated with other living aspects in the city, such as the cost of living and the weather. Students preferred cities with a lower cost of living and tuition fees but avoided cities with extreme weather conditions. Wintre et al. (2015) also discovered that location is an influencing factor for international students in selecting Canada as their study destination. Oliveira and Soares (2016) on the other hand proposed that it was the geographic proximity of the destination country that mattered when it comes to the location for overseas study. The authors argued that a short travel distance between home and study destination was a strong motivation in the selection process. Students wanted to be closer to families and they also expected to find cultural similarities in the destination country that is close to home. In terms of proximity, Bodycott (2009) discovered mixed attitudes between Chinese parents and students. Mainland Chinese parents considered proximity between the host destination and home country to be a very important attribute that was in contrast to the perception held by students. Singh et al. (2014) discovered that Asian students chose to study in

Malaysia because of the close proximity to their home countries. Similarly, Ahmad and Buchanan (2016) discovered that Cambodian and Singaporean students have chosen Malaysia for the same reason.

2.5.2.6 Host Country Visa Processing

Contrary to the findings from the aforementioned studies, Cheng et al. (2013) discovered that geographical proximity, compared to social and cultural proximity, had minimal effect on students' choice. In relation to location and country proximity, students are also interested in the flexibility of visa processing and migration opportunities within the country (Cubillo et al., 2006; Americanos, 2011; Cheng et al., 2013; Wintre et al., 2015; Ahmad & Buchanan, 2016; Kaur, 2016). Easy visa processes and simplified immigration procedures, for instance, make one country more appealing for study than another.

2.5.3 Factors Influencing Choice of HEI

A review of the literature found at least ten factors influencing students' choice of HEI and they differ greatly from quality expectation to program attributes and expected outcome. These factors are: reputation of the institution, programs and courses offered, tuition fees, campus facilities and environmental traits, teaching and quality learning environment, entry requirements, institution location and future employability upon graduating from particular HEIs.

2.5.3.1 Institution Reputation and Recognition

The common factor that students considered in their choice is the reputation of the institution. It is commonly understood that an institution's reputation refers to the prestige of the institution, such as gaining recognition nationally and/or internationally and its ranking (Ancheh et al., 2007). The institution's reputation has been identified by many studies as the most influencing factor for choosing an HEI (Mazzarol & Soutar, 2002; Maringe & Carter 2007; Pyvis & Chapman 2007; Fernandez, 2010; Chia, 2011; Cheng et al., 2013; Kusumawati 2013; Wu, 2014; Ahmad & Buchanan, 2015 and 2016; Kaur, 2016); there are studies that also take account of the institution's brand image as a measure of HEI reputation (Cubillo et al., 2006; Koe & Saring, 2012; Khairani & Razak 2013; Wilkins & Huisman, 2014). According to Kotler and Fox (1995), the institution's

image is composed of opinions, ideas and impressions that prospective students have of the institution. Other aspects that are often closely associated with the institution's reputation include the strategic links or alliances the institution formed with other institutions or the industry (Mazzarol & Soutar, 2002; Padlee et al., 2010; Koe & Saring, 2012) and the institution's years of academic experience (Wu, 2014; Migin et al., 2015).

Mazzarol and Soutar (2002) in their study conducted across four different countries revealed that international students focused upon the reputation of the HEIs in providing quality education, institution links or alliance with other institutions, and reputation for having high quality staff. Similarly Maringe and Cater (2007) also discovered international recognition of the qualifications was a major pull factor for African students seeking their desired institution overseas. On the other hand, Kusumawati (2013) argued an institution's reputation should be based on university ranking, achievement and recognition by others. The author contended that university ranking was often equated to institutional quality and her study discovered that both students and parents perceived top ranking universities provide the best quality education which is instrumental for students to access good career opportunities. Similarly Wu (2014) discovered that Chinese students placed high importance on university ranking and course ranking. Other research studies also supported that international rankings for institutions or programs have been relied upon by international students for measuring the quality of an institution in their selection process (Chia, 2011; Wintre et al., 2015; Kaur, 2016; Oliveira & Soares, 2016). In addition to ranking, Wu (2014) also articulated that university heritage may also put an institution at an advantage. Chinese students perceived the quality of education as a reflection of the year of establishment of the institution. It is perceived that the longer the university has been established, the more reputable the university is and the better quality education it offers (Wu, 2014; Migin et al., 2015).

According to Cubillo et al. (2006), institutions need to maintain and develop a distinctive image in order to establish a competitive advantage. The authors thus took a wider approach and regarded reputation as part of an institution's image. An institution's image, according to the authors, broadly covered three areas: 1. Corporate image, which mainly accounted for institution prestige, ranking, branding, academic and research reputation;

2. Faculty image, which was attributed to teaching quality; 3. Facility aspects, whereby the authors considered social and safety features, as well as the availability of facilities. Wilkins and Huisman (2014) affirmed that the reputation and prestige of the home campus formed a strong influence on the image of a branch campus. Students used the home campus image, in particular the ranking and achievement of the institution, as a cursor to judge the quality of the international branch campus. Research studies on international students in Malaysia by Fernandez (2010), Koe and Saring (2012) and Khairani and Razak (2013) identify the institution's image and reputation as an important factor in attracting these students to select the HEI for their overseas study. Migin et al. (2015) postulate that the longer the history of an HEI existence, the higher the perceived reputation for delivering higher quality programs.

2.5.3.2 Institution Program and Course

The next important HEI criterion is related to the program and course offered. Program attributes include availability of programs, duration of programs and the variety and range of programs offered. This item is also a core part of an institution's reputation and recognition. Cubillo et al. (2005) identify that the selection of an HEI by the decision-maker for overseas study is also influenced by the programs offered by this institution. The decision-maker will consider suitability and specialisation of the program, quality of the program, international recognition of the program, as well as recognition by future employers when selecting an HEI for overseas study (Cubillo et al., 2005; Chia, 2011; Wu, 2014). On the other hand, Maringe and Carter (2007) and Bodycott (2009) argued that the availability and the range of programs are of the utmost importance. Research studies on international students in Malaysia reveal these students compare different HEIs based on program quality, ease of admission to the institution, ease of credit transfer and duration of the program (Cheng et al., 2013; Kaur 2016). The duration of the program is closely related to the cost factor. The longer the duration of a program, the higher the cost of an overseas education. Migin et al. (2015) on the other hand emphasised program relevancy. The authors postulated that international students are likely to venture overseas for education if the program they are interested in is not offered in their home country, especially if that program is recognised by future employers in their home country. While the aforementioned studies show that the program and course have a positive influence

on students' choice, Kharani and Razak (2013) refuted this positive relationship and regarded the program and course as the least important consideration for students.

2.5.3.3 Tuition Fee

Section 2.5.2 identified cost as one of the key factors in influencing choice of study destination from the literature review. One of the core items in this cost factor is the tuition fee charged by the HEI which is discussed in greater details in this section as factor influencing choice of HEI. The tuition fee is an important component in the financial costing of an overseas education. Studies undertaken by Mazzarol and Soutar (2002), Pyvis and Chapman (2007), Bodycott (2009), Padlee et al. (2010), Baharun et al. (2011), Koe and Saring (2012), Wilkins et al. (2012), Cheng et al. (2013), Wu (2014), Oliveira and Soares (2016) and Ahmad and Buchanan (2016) found that this item has a significant influence on international students' decision for overseas study regardless of the student's nationality and background. Ahmad and Buchanan (2016) claimed that the comparatively low tuition fee and cost of living in Malaysia has made this country a popular study destination for international students. Studies by Bodycott (2009) and Kaur (2016) offer an important insight for this study: affordability of an overseas education is not only dependent on the socioeconomic status of the decision-maker, but also on the question of who is paying for this overseas education. Bodycott's (2009) study on Chinese parents and students found that the former felt a greater impact from the cost of education than the students because they are usually the ones to fund their children's education. Hence this study takes into consideration the third party influence in international student's decision-making, besides socioeconomic information. Some of the studies further discovered that international students are also interested in the availability of financial assistance from HEIs to subsidise the cost of an overseas education (Fernandez, 2010; Cheng et al., 2013; Oliveira & Soares, 2016). Cheng et al. (2013) pointed out that while low tuition fees attracted international students to Malaysia, the availability of scholarships would affect their choice of institution. Similarly Oliveira and Soares (2016) also found that international students favoured HEIs that provide a scholarship opportunity.

2.5.3.4 Institution Facilities and Support

The next influencing factor is campus facilities and environmental traits. Campus facilities or infrastructure include features such as libraries, internet, lab, sports facilities, recreational centres, cafe, canteen, dormitories, clubs and societies. These attributes are deemed important as they provide entertainment and leisure to international students (Ancheh et al., 2007; Padlee et al., 2010; Baharun et al., 2011; Koe & Saring, 2012; Kaur, 2016). Fernandez (2010) study revealed that students considered the availability of sufficient and contemporary facilities to be of high importance. Similarly Khairani and Razak (2013) also found the university's environment and facilities have a significant impact on the decisions of international students. Students in their study placed greater consideration on these factors than programs and course-related matters. Migin et al. (2015) ascribed great importance to the availability of clubs and societies to international students. According to the authors, being away from home might be emotionally taxing for international students. Participating in different club/society activities allowed the international students to interact with their peers and experience university life. Campus facilities, however, may not often appear as the key criteria in students' choices. A number of studies suggested that the availability of various campus facilities to be attractive to some international students (Bodycott, 2009; Fernandez, 2010; Khairani & Razak, 2013; Kusumawati, 2013). Environmental traits on the other hand refer to the conditions and atmosphere within the campus and the surrounding neighbourhood. There is strong evidence of the significance of the campus atmosphere as influencing factors in the literature (Wilkins et al., 2012; Kusumawati, 2013). The campus atmosphere referred to the overall surroundings of the HEI, which broadly included the campus environment, facilities, safety and interaction aspects in which these authors postulated that the campus atmosphere positively influenced students' learning processes and directly affected their success in achieving their degree. Other important environmental attributes include safety within the campus and neighbourhood, availability of public transport, and accessibility to public services (restaurants, clinics, shops and banks) (Sidin et al., 2003; Ancheh et al., 2007; Khairani & Razak, 2013). International students in Wilkins et al. (2012) placed great importance on the availability of entertainment on campus, activities in town and availability of nightlife.

2.5.3.4 Institution Learning Environment

Teaching and the quality of the learning environment refer to an HEI's standard of education by measuring various aspects pertaining to students' learning outcomes. Quality, as suggested in Zain et al. (2013) study, emphasises the academic staff's abilities, such as experience, qualifications and knowledge of lecturers, as well as the suitability of the syllabus. Mazzarol and Soutar (2002) identified quality of the institution's staff as a key influencing factor in the HEI consideration for international students. Similarly teaching and learning environments fielded by experienced, qualified and knowledgeable lecturers were also a strong determinant of students' choice of HEI in the (Zain et al., 2013) study. A number of studies expanded to include English as the medium of instruction or an English-speaking environment as attributes for a teaching and quality learning environment (Bodycott, 2009; Padlee et al., 2010; Baharun et al., 2011; Trahar, 2014; Kaur, 2016). Padlee et al. (2010) proposed a number of additional features: English usage, English specialised field staff, as well as the qualifications of the teaching staff.

2.5.3.5 Ease of Entry Requirement

There are also other institutional factors identified by the research studies that have an impact on international students' decision-making, which are entry requirements (Mazzarol & Soutar, 2002; Maringe & Carter, 2007; Ancheh et al., 2010; Americanos, 2011; Cheng et al., 2013; Kusumawati, 2013), institution location (Cubillo et al., 2006; Padlee et al., 2010; Baharun et al., 2011; Chia, 2011; Americanos, 2011; Koe & Saring, 2012; Cheng et al., 2013; Wu, 2014; Wintre et al., 2015), and future employability upon graduating (Cubillo et al., 2006; Maringe & Carter, 2007; Americanos, 2011; Wilkins et al., 2012; Cheng et al., 2013; Ahmad & Buchanan, 2015; Kaur, 2015).

2.6 Third Party Influence in Students' Choice and Decision-Making

Consumer behaviour is often affected by individuals with whom they are closely associated. There is strong evidence in the literature that discusses the impact of third party influence in students' decision-making processes. Student choice may be subjected to the influence of parents, relatives and friends, education agents, HEI marketing (such as counsellors, university admission officers), alumni, internet and mass media or third party channels, such as the word-of-mouth effect (Mazzarol & Soutar, 2002; Pimpa, 2003;

Padlee et al., 2010; Morrish & Lee, 2011). Third party influence is particularly apparent when students proactively seek information on the prospective country and HEI prior to making their decision. At this stage the influence from others can either have a push or pull effect on the students' decision. For instance, parents or family expectations may be a push factor for students to study abroad (Pimpa, 2004). Having friends or relatives who currently study or live in the host country on the other hand may constitute a pull factor in attracting a prospective student to choose a particular study destination and/or HEI (Mazzarol & Soutar, 2002). Similarly the recommendations from others (family, friends and alumni) can also greatly influence international students' choice (Pimpa, 2003). The intensity of influence from each of these sources on the decision outcome may vary.

2.6.1 Parents

Parents have been identified by several research studies to play a crucial role in influencing the decision-making process, from the study destination selection to HEI choice (Pimpa, 2002, 2003 and 2004; Mazzarol & Soutar, 2002; Yamamoto, 2006; O'Brien et al., 2007; Wagner & Fard, 2009; Ivy, 2010; Johnston, 2010; Koe & Saring, 2012). Mazzarol and Soutar (2002) discovered the decision to study abroad is frequently a family decision. This is supported by the Pimpa (2004) study in which the author revealed that family members influenced Thai students' decision-making greatly. Meanwhile Lee (2015) identified that parents play both a functional and expressive role in the decision-making. The functional role mainly refers to the financial support for overseas education. The expressive role, on the other hand, involves supporting the individuals in the decision-making process (Lee, 2015). Likewise in a study of family influence on the Thai students' decision-making process, Pimpa (2004) discovered parents' influence was strongest in informing students' decision to study abroad. Parents' influence was however not as influential on students' choice of academic program and the choice of university. The choices for HEI and the program selected tended to be made by the students themselves without strong influence from parents or family members. Sojkin et al. (2012) study supported this finding that while the generic decision to study abroad is usually made with parents' input, the choices relating to the specific HEI and program for their overseas study are usually made by the individual students. A number of studies also discovered that parents who exert a strong influence on a student's

behaviour and lifestyle tend to exercise a greater influence on the student's decision-making process (Chapman, 1981; Isherwood, 1991; Pyvis & Chapman, 2007; Li et al., 2009). This is especially true when parents know and are familiar with the selected country destination or a particular institution (Mazzarol & Soutar, 2002; Pimpa, 2002, 2003, 2004).

2.6.2 Relatives and Friends

Having relatives or friends in the host country is another common reason for studying in the host country (Wintre et al., 2015). International students are more likely to choose an institution in a country that they or someone they know have reasonable knowledge of or are residing in the country (Mazarrol & Soutar, 2002; Pimpa, 2003; Shanka et al., 2005; Wilkins & Epps, 2011). The influence under such circumstances is a pull factor attracting international students to choose a particular country. This is consistent with past studies that suggest that when individuals are faced with uncertainty they will normally seek familiar brands or will seek the advice of people they trust (Chiou, 2003). Thus the more familiar they are with the country, the more likely they are to select the country for their overseas education (Morrish & Lee, 2011; Pimpa, 2004).

2.6.3 Education Agents

Education agents constitute a potential source of influence on students' choice of decision-making. HEIs tend to engage education agents to supplement their student recruitment efforts. A number of studies carried out in New Zealand (Ward & Masgoret, 2004), the UK (Maringe & Carter, 2007; British Council, 2010), and the US (Zhang, 2011) identified a high percentage of prospective international students that had or planned to use the services of an agent. Education agencies provide a one-stop service to prospective students ranging from information gathering to admission applications (Pimpa, 2002a). The students took into consideration the agents' opinions when deciding on a study destination, particularly if they are not familiar with the country (Morrish & Lee, 2011). Despite the popular use of education agents among international students, education agents were found to be less of an influential factor compared with parents and relatives (Pimpa, 2002b). Similar results were produced by Mazarrol and Soutar (2002) in which parents and relatives were found to be more influential than agents. Robinson's

study (2007) highlighted that some students questioned the credibility of information from commercial agents. Likewise Yang (2007) discovered that education agents in China were facing diminishing credibility.

2.6.4 Recommendations from Others

Recommendations from others in the form of word-of-mouth (WOM) have also been noted in a majority of the studies (Pyvis & Chapman, 2007; Cheng et al., 2013; Zain et al., 2013; Singh et al., 2014). WOM represents the customers' willingness to recommend the products and services to others (Athiyaman, 2000; Jiewanto et al., 2012). Zain et al. (2013) suggested that WOM, along with the traditional medium of advertising (such as radio and TV), is effective in attracting prospective students. The authors also suggested making current students ambassadors to share positive and favourable HEI information with the public. Online searches for information, such as internet searches, website and social media, are becoming popular with students who value immediate and prompt responses from these media (Sojkin et al., 2012). Students rely on social media as important WOM sources to provide them with feedback and reviews from others that are deemed more reliable (Wilkins & Epps, 2011; AACRAO, 2014).

The above discussion shows that several studies identified the significance of a third party influence on students' decision regarding where to study and/or which institution to attend. Koe and Saring (2012) on the contrary deny the existence of a third party influence on students' choice and decision. In their study the authors identified that the HEI choice is a decision made solely by students with no influence from family and friends. However they explained the disparity in their findings between their study and others could be due to the respondent profile in their study sample. The study was carried out to examine undergraduate students' choice of future postgraduate studies. The authors argue that the respondents are adults who already have prior experience with higher education and are independent in making their own decisions.

The review of thirty empirical literature studies confirms that the higher education market is not homogenous and overseas education does not provide the same experience for everyone (Reay et al., 2001). When deciding between alternatives, students will construct

new evaluation criteria based on information acquired through internal or external searches (Blackwell et al., 2001). There is unlikely to be a single factor that all students use; similarly there is not a short list of factors that will finally provide a definitive answer as to why students choose an HEI. To date there are no specific identified factors or characteristics which drive the choices of all international students (Hemsley-Brown & Oplatka, 2015). The variables create difficulties when attempting to develop an ideal concept of what ultimately is significant to students' decision-making (Padlee et al., 2010). It is questionable that results are non-conclusive as most researchers identified diverse factors that influence students' choices, some contradicting others (Wilkins et al., 2012). Table 2.1 summarises the influencing factors of students' choice and decision-making from previous studies. Despite a wide range of factors influencing international students' choice and decision-making being identified, there are still gaps for further research. Such limitations have been commonly addressed in many previous studies and suggestions have been made for extensive research to be carried out, particularly in relation to international students in private HEIs.

Table 2.1 Summary of empirical studies on factors influencing students' choice and decision-making

	Home Country			Personal Attitudes			Host Country							Institutional							Influences from Others				Personal Characteristics													
	Employer's Recognition	Limited Accessibility for HE	Political/Economic Stagnation	International Experience	Oversea Education is Better	Career Prospect	Advantaged Position	Country Image	Cultural/ religion Diversity	Political Stability/ safety	Cost of Living	Language Commonality	Location/ Proximity	Visa Processing	Migration Opportunities	Social Experience	Instituion Image	Reputation & Recognition	Strategic links & Alliances	Teaching & Learning Quality	Programme & Course	Entry Requirement	Course Fee	Location	Future Employability	Campus Environment/ Facilities	Parents	Family & Friends	HEI Marketing	Agent	Internet/ Mass Media	Recommendations from Others	Gender	SES Background	COO / racial group			
International Context																																						
Oliveira & Soares (2016)		✓		✓		✓		✓	✓		✓	✓	✓					✓		✓	✓				✓				✓									
Ahmad & Buchanan (2016)									✓	✓	✓			✓									✓															
Wintre et al. (2015)				✓		✓				✓	✓		✓	✓	✓			✓		✓	✓		✓	✓				✓										
Lee (2015)		✓			✓	✓	✓	✓				✓					✓			✓	✓								✓						✓			
Wilkins & Huisman (2015)																																						
Wu (2014)						✓	✓		✓		✓							✓		✓	✓			✓								✓						
Zheng (2014)								✓			✓	✓																						✓	✓			
Kusumawati (2013)						✓					✓		✓					✓		✓		✓	✓			✓		✓										
Wilkins et al. (2012)				✓		✓		✓			✓						✓	✓					✓		✓	✓							✓	✓				
Americanos (2011)											✓			✓	✓			✓			✓	✓	✓	✓	✓		✓	✓		✓		✓						
Chia (2011)											✓							✓			✓		✓	✓		✓	✓					✓						
Bodycott (2009)				✓	✓		✓													✓	✓					✓		✓	✓									
Maringe & Carter (2007)		✓	✓	✓				✓										✓		✓	✓	✓			✓	✓		✓	✓	✓	✓	✓						
Cubillo et al. (2006)	✓			✓		✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓	✓	✓		✓				✓						
Mazzarol & Soutar (2002)		✓	✓	✓	✓			✓		✓	✓					✓	✓	✓	✓	✓		✓					✓		✓		✓	✓			✓			

[illegible][illegible]

2.7 Gender

Higher education research in the past has highlighted the complex interrelationships between demographics and decision-making (Brown & Oplatka, 2014). Students' demographics are also referred to as personal characteristics that include age, race and ethnicity, socioeconomic status, household income and more. Gender is among the most studied demographic factor in previous literature pertaining to students' choice and decision-making (Sam, 2001; Sidin et al., 2003; Aldemir & Gulcan, 2004; Joseph et al., 2005; Veloutsou et al., 2005; Baharun et al., 2011; Sojkin et al., 2012; Hemsley-Brown & Oplatka, 2015). Similar emphasis has also been placed on investigating the differences between genders in their perception and satisfaction experience (Aldemir & Gulcan, 2004; Sojkin et al., 2012; De Jager & Gbadamosi, 2013; Ansary & Jayashree, 2014). Some studies discovered significant differences in gender (Sam, 2001; Aldemir & Gulcan, 2004; Joseph et al., 2005; Veloutsou et al., 2005; Baharun et al., 2011; Sojkin et al., 2012). Veloutsou et al. (2005), for instance, discovered gender differences in regard to information collected by international students. Female students utilised and referred to more sources during the information search phase. Baharun et al. (2011) and Sojkin et al. (2012) found that female students have a higher tendency to be subjected to the influence of a third party compared to male students. Sojkin et al. (2012) found that Polish females tend to consider family opinions when making choices, while Polish male students tend to consider their future career. The authors attributed this difference to Poland's masculine culture, which demonstrates higher divergence between the values of men and women in a society, with men being more oriented towards career and success, and women showing more social and family orientation. Sam (2001) indicated that males were attracted more to the availability of sports and recreation facilities when choosing an HEI, while Baharun et al. (2011) on the contrary discovered it was the female students who placed more value on campus facilities. Pertaining to the security aspect, Joseph et al. (2005) revealed that female students placed more priority on safety within campus when choosing an HEI. Alternatively, in the Sojkin et al. (2012) study, the authors demonstrated that male students perceived an institution's reputation, courses offered, cost of studies and accessibility of financial aid to be more important than their female counterparts. Hemsley-Brown and Oplatka (2015), on the other hand, identified minimal

differences between male and female students. Despite this the authors claimed that gender could have an indirect impact on institutional choice due to security factors.

In regard to gender differences in satisfaction levels for the study experience, Aldemir and Gulcan (2004) found that a great majority of female students expressed satisfaction with the faculty in comparison to male students. However Sojkin et al. (2012) observed that male students tend to have better experiences with an institution when their overall academic achievement was good. Female students on other hand were more satisfied with social conditions in terms of friendships formed with the local students, as well as the local community. Meanwhile, for De Jager and Gbadamosi (2013), the authors discovered significant differences in sports recreation and facilities and overall satisfaction. Male students were more involved in sports and generally regarded sports facilities as more important than females did. The study by Ansary and Jayashree (2014), on the contrary, indicated no differences in students' satisfaction in terms of gender.

2.8 Students' Satisfaction

Consumer satisfaction is defined as 'the overall feelings, or attitude a person has about a product after it has been purchased' (Solomon et al., 1999, p. 256). Similarly, Linder-Pelz (1982 cited in Gotlieb et al., 1994, p. 875) described satisfaction as 'primarily an effective response to a specific consumptive experience'. Fornell (1992) pointed out that customer satisfaction is the overall measurement of customer experience after the purchase. Prior to the purchase consumers may have set certain expectations, and after the purchase or consumption they will make an evaluation of the products or services. Hence satisfaction is a post purchase or post consumption response (Buddhichiwin, 2013). Customer satisfaction is a critical determinant of business profit and sustainability (Jamal & Naser, 2002; Busacca & Padula, 2005). It can impact on a business market share, competitive position, productivity, return of investment, profitability and quality of service (Athiyaman, 2000; Grigoroudis & Siskos, 2004; Arambewela & Hall, 2006; Turkyilmaz & Ozkan, 2007; Bianchi & Drennan, 2012).

In the case of higher education, Elliott and Shin (2002, p. 198) defined student satisfaction as 'the favourability of a student's subjective evaluation of the various outcomes and

experiences associated with education'. Students' satisfaction can therefore be regarded as students' emotional response that has resulted from evaluating the service experience against their perceptions (Rust & Olivier, 1994). Specifically, service experience may include interactions with academic and general staff, the campus environment, administrative services, such as application and enrolment processes, as well as the interaction experience with other classmates).

As discussed earlier in Section 2.1, the higher education service is experiential (Lewis & Mitchell, 1990) and has very few tangible search attributes that can be evaluated before purchase. It is therefore important for HEIs to understand whether their customers are satisfied with their purchase on the grounds of whether the latter's actual experience corresponds with the perceived service quality they initially established (based on key influencing factors) during the decision-making process. Service quality is an important driver of customer satisfaction and behavioural intention. Numerous quantitative studies have shown that service quality is a predictor of customer satisfaction (Bitner et al., 1990; Cronin & Taylor, 1992; Carrillat et al., 2007; McDougall & Levesque, 2000; Ramseook-Munhurrin & Naidoo, 2011). A satisfied customer believes that the supplier provides a good service that creates specific levels of perceived value at which the customer is likely to remain positively engaged with the supplying organisation, such as a repeat purchase or a positive customer referral (Arambewela & Hall, 2003; Wicks & Roethlein, 2009; Bianchi & Drennan, 2012; Slethaug & Manjula, 2012; Buddhichiwin, 2013; Chong, 2015). This study assesses the satisfaction level of the international students towards the decision that they made based on the key influencing factors. Furthermore it investigates the relationship between this satisfaction level and their future word-of-mouth behaviour in consumer referrals.

2.8.1 Empirical Studies on Students' Satisfaction

Previous empirical studies on students' satisfaction shows that the satisfaction level can vary across different influencing factors of country context and background of the international students. The UK Council for International Education (UKCOSA), in November 2006, published the findings of an extensive survey on international student satisfaction. The report concluded that whilst the large majority of international students

seemed content with the quality of their course, they were less satisfied in relation to their overall student experience. This revealed that although the quality of education undoubtedly plays an important role in students' satisfaction (Mavondo et al., 2000), international students' satisfaction was not limited to merely academic needs but the entire living and learning experience (Chong, 2015). Sojkin et al. (2012) looked at student satisfaction in the evaluation stage: the last stage of the authors' three-step students' decision-making model. The study focused on institutional factors, such as social conditions, professional advancement, pragmatism of knowledge, educational facilities, courses offered and faculties and achievement as factors contributing to the satisfaction of Polish students. The study revealed that social conditions, in particular sports facilities, canteen, coffee bars, parking spaces and subsidised accommodation were the strongest satisfaction determinants. Meanwhile, in a comparative study conducted by Lim et al. (2011) between Middle Eastern and Chinese students, the authors investigated the influencing factors that attracted international students to Malaysia: their perception of service quality as well as their satisfaction towards Malaysian private HEIs. The authors identified that while the general factors that attracted both groups of participants were similar (reputation, quality of academic staff, course content, program-related issues, costs, delivery of services, and management's concern for students), the outcomes were different. Students' attitudes and overall study experiences were not the same. Middle Eastern students were somewhat satisfied with their host institution, while Chinese students indicated the opposite. Chinese students perceived that overall their host institutions were not performing satisfactorily in providing quality education services.

Also focusing on institutional experience, Khan (2012) studied students' perceptions of service quality of HEIs in Pakistan using the HECPQA (Higher Education Commission of Pakistan Quality Assurance) framework and discovered positive and statistically significant relationships and the influence of academic courses, learning environment, assessment feedback to students, students' feedback, and quality of the academic faculties on students' satisfaction. In the De Jager and Gbadamosi (2013) study, the authors investigated students' perception of service quality with an attempt to identify the major predictors of students' satisfaction with their HEI. By comparing students' perceptions and expectations, the study revealed that students perceived their actual experiences to be

lower than what they expected. The perception of service quality was assessed by thirteen factors that were Africa-specific, where the study was conducted. Seven out of thirteen service qualities were found to be significantly important in predicting students' overall satisfaction: internationalisation, marketing and support, access and approachability, international students and staff, academic quality, accommodation and scholarship, and sports reputation and facilities. Using a different approach, Bianchi (2013) explored international students' satisfaction through the critical incident technique (CIT), a procedure used for collecting direct observations of human behaviour that have critical significance and meet methodically defined criteria. The author identified four categories (containing 33 subcategories) of satisfiers and dissatisfiers for international students which are related to education service performance, personal performance, socialisation performance and living performance. Memon et al. (2014) research study on Malaysian universities discovered students are generally satisfied with various aspects of service quality within Malaysian universities, including academic and non-academic aspects, program issues, university reputation and access to university facilities.

While most satisfaction studies focused on the institutional level, very little attention has been paid to the influence of the external environment on students' satisfaction (Ward & Masgoret, 2004). Some researchers argue that the international students' study experiences are determined not only by their education experience but also other experiences including their home life, job, relationships, security and meaningful community engagement, all of which are integral to students' wellbeing (Council of Australian Governments, 2010). Some researchers have looked beyond the internal environment to include the external environment (local community) in their studies. Arambewela and Hall (2003), in their study, indicated both the internal and external environment as having an impact on students' satisfaction. However, as students tend to spend the majority of their time in the community where they live, the external environment has a greater influence on determining their satisfaction. Inch and Sun (2013) study on the overall satisfaction towards the host city attributes of international students in Dunedin in New Zealand revealed that students put more emphasis on city attributes, such as shopping and dining, appeal and vibrancy, socialising and sense of community and public transport. Memon et al. (2014) also identified that the community

in which the students live and spend most of their time is a critical determinant in influencing international students' satisfaction. The social interactions students have with the local community provide opportunities for international students to broaden their knowledge and this impacts upon their level of satisfaction. While most studies agreed on the impact of the external environment in affecting students' study experience, Finn and Darmody (2016) found otherwise. In their study, conducted in Ireland, the authors discovered that the internal environment within the campus remained the strongest influence on international students' satisfaction. On the other hand, the external environment, such as the living situation (type of accommodation), as well as the availability of a part-time job, did not appear to affect their satisfaction.

The discussion on the empirical studies confirms that international students' study experiences are not the same. Table 2.2 summarises the service quality dimensions (both the internal and external environment) that were identified from the previous literature. The review of existing satisfaction studies shows that the same reasons that attracted them to an institution and a study destination might not be the same factors that affect their study experience. There are numerous internal and external factors (see Table 2.2) that affect their perceptions of the service quality received that ultimately shape their overall satisfaction. It is therefore critical to manage students' perceptions of service quality, as satisfaction with the study experience may affect students' performance (Bean & Bradley 1986; Pike, 1991) and their attitude towards the institution (Aitken 1982; Tinto 1993; Athiyaman, 1997; Brown & Mazzarol, 2009; Carter, 2009; Chong, 2015), as well as the host country (Ward & Masgoret, 2004; Arambewela & Hall, 2003; Insch & Sun, 2013; Memon et al., 2014). Students' satisfaction is thus a strategic differentiator for HEIs in strengthening their brand image in the competitive market (Munteanu et al., 2010; Arambewela & Hall, 2003; 2006; Chong, 2015).

Table 2.2 Summary of empirical studies on students' satisfaction

	General satisfaction drivers																			Personal Charateristics						Future Behaviour						
	HEI Image & Reputation	Quality Program/ Course	Teaching Quality	Learning Environment	Classroom Responsiveness	Learning Support	General Support	Efforts to Care	Delivery of Service	Administrative Related	Attitude towards Students	Campus Facilities	Social Experience	Country Image	Cultural Aspect	Visa & Migration	Cost Related	Safety Aspect	Environment Traits	Living Conditions	Location & Accessibility	Public Transportation	Gender	Age	Country of Origin	Programme Type	Years of Study	Institution type	Employment Status	WOM	Loyalty	Future Intention
Finn & Darmody (2016)		✓											✓										✓	✓								
Padlee & Reimers (2015)		✓	✓	✓	✓	✓																✓	✓			✓						
Ali et al. (2015)	✓	✓	✓		✓					✓																					✓	
Dragan (2015)		✓																					✓						✓			
Nell & Cant (2014)										✓																						
Chavan et al. (2014)			✓	✓	✓	✓	✓	✓		✓		✓	✓																			
Memon et al. (2014)	✓	✓	✓	✓	✓														✓	✓	✓											
Arambewela & Hall (2013)	✓	✓	✓	✓		✓	✓						✓					✓	✓	✓												
deJager & Gbadamosi (2013)	✓	✓			✓	✓	✓	✓		✓		✓	✓					✓	✓	✓	✓	✓	✓	✓			✓					✓
Insch & Sun (2013)													✓	✓	✓			✓	✓		✓	✓					✓					
Bianchi (2013)		✓	✓	✓			✓			✓	✓	✓	✓						✓	✓												
Khan (2012)		✓		✓	✓	✓	✓	✓			✓	✓																				
Sojkin et al. (2012)		✓										✓	✓									✓	✓		✓			✓				
Lim et al. (2011)	✓	✓	✓					✓	✓			✓					✓															
Ledden et al. (2011)	✓				✓				✓	✓	✓	✓	✓													✓				✓		

2.8.2 Students' Satisfaction and Willingness to Recommend

There are numerous empirical studies in support of customer satisfaction leading to favourable behavioural responses that benefit an organisation (Alves & Raposo, 2007; Clemes et al., 2008; Yildiz, 2013). Behavioural responses or behavioural intentions have been defined as an individual's conscious decision to exert effort to carry out a particular behaviour (Hsu, Huang & Swanson, 2010). Previous literature has identified a number of behavioural outcomes of satisfaction such as 1) Word-of-mouth (WOM) (Arambewela & Hall, 2003; Slethaug & Manjula, 2012; Bianchi, 2013; Buddhichiwin, 2013; Chong, 2015); 2) Students' loyalty (Athiyaman, 1997; Brown & Mazzarol, 2009; Carter, 2009; Petruzzellis et al., 2006; Cassidy, 2014; Chong, 2015); 3) Willingness to buy (Chen & Dubinsky, 2003; Kleijnen et al., 2007); 4) Intention to repurchase (Brady & Robertson, 1999; Cronin et al., 2000; Eggert & Ulaga, 2002; Choi et al., 2004; Lam et al., 2004); and 5) Brand equity (He & Li, 2011).

In the case of higher education, the importance of gaining insight into students' behavioural intentions lies in their direct link to retaining enrolled students and attracting prospective students (Navarro et al., 2006). Service quality is an important driver of customer satisfaction and can augment customer behaviour and attitude (Boshoff, 1997; Keaveney, 1995). When students are satisfied with the HEI's services, they become loyal to their institution. This may improve the credibility and prestige of the HEI, which can then lead to an increase in brand equity and eventually grow the number of students (Marzo-Navarro et al., 2006). If a negative attitude is formed, this could result in complaints, decreasing loyalty and negative word-of-mouth promotion (Maxham & Netemeyer 2002; Kau & Loh, 2006). Word of mouth (WOM) represents the customers' willingness to recommend the products and service to others (Athiyaman, 2000; Jiewanto et al., 2012). WOM is often deemed a positive outcome of customers' satisfaction that benefits a business or service and which an organisation has little control over. As a result, WOM earns higher credibility than the traditional marketing tools such as television, radio, newspapers, magazines and the internet (Bruce & Edgington, 2008) as it typically relies on people's prior experience of a product or service (Athiyaman, 2000; Jiewanto et al., 2012). Murray (1991) suggested that consumers tend to rely on WOM to reduce the level of perceived risk and uncertainty that is often associated with service purchase decisions. WOM has been regarded as one of the most powerful marketing tools in higher education (Buddhichiwin, 2013). Arambewela and Hall (2003), for instance, identified a significantly strong relationship between satisfied students with positive WOM and student retention. Students are likely to recommend family members and friends to pursue higher

education at the particular university that they are satisfied with (Slethaug & Manjula, 2012). Positive WOM not only improves students' retention but also leads to better branding and a better reputation for the university (Arambewela & Hall, 2003). Conversely negative WOM may tarnish the reputation and brand of an HEI and eventually cause the HEI to lose potential students (Chong, 2015). HEIs need to pay attention to factors that these institutions rely upon for their differentiation strategy and competitive advantage and that are valued by international students. This will ensure that they meet the perceived service quality and needs of their target market for a satisfaction level that pays dividends to their profitability and sustainability (Mazzarol, 1998; Bourke, 2000; Arambewela & Hall, 2003, 2006).

2.9 Conceptual Model

This study investigates key influencing factors that international students rely upon for their choice of HEI to pursue their overseas education. In addition it assesses the satisfaction level of the international students towards the decision that they made based on the key influencing factors. Furthermore the relationship between satisfaction and future word-of-mouth behaviour in consumer referrals is being investigated in this thesis.

The conceptual framework for investigating the key influencing factors in this study is based on two models: the consumer decision-making model (Kotler, 1997) and the push-pull theory (Mazzarol & Soutar, 2002) under the premise of the bounded rationality theory. The theory implies that international students make a decision on their overseas higher education (based on key influencing factors) that they deemed satisfying and acceptable according to their perception at that instance. Their perception may be augmented or changed during their study period at their selected HEI when they are able to compare their original perception with the actual experience. The gap from this comparison would cause the customer to feel satisfied or dissatisfied.

As identified from the literature review of previous studies on international students' choice of HEI, selective factors were investigated by each of the prior studies. This research is the first study to investigate a comprehensive range of key influencing factors drawn from the different stages of the consumer decision-making (CDM) models. The push or pull effect was also ascribed to each key influencing factor in the hypothesis. Additionally, international students' satisfaction towards specific key factors and overall satisfaction were determined in the

conceptual framework with analysis extending to their behavioural intention as customer referrals through word of mouth (WOM).

The conceptual framework for this study includes key influencing factors from stages in the international students' decision-making processes according to the CDM model, which are: 1) Problem recognition that motivates international students' decision to study abroad. During this stage the model investigates the push factors (limited accessibility in the home country and personal attitude factors) that are likely to lead to prospective students making the decision to pursue international higher education; 2) The information search is where students start looking for information about the prospective country and an HEI. Students may be subjected to third party influence at this stage; 3) Once students have gathered the relevant information from a variety of sources, they go through the evaluation of alternatives where they narrow down their options to a preferred list of choices; 4) Students decide which country will be their study destination and in which HEI they will pursue their overseas education; 5) The final stage or the post decision evaluation happens after students begin their international higher education in the preferred study destination in their chosen private HEI. Students assess their international education experience based on the criteria they have used earlier. If service quality falls below students' expectations, students may be dissatisfied and vice versa (Kotler & Fox, 1995). Students' satisfaction levels might influence their future behaviour. Figure 2.3 exhibits the proposed conceptual model.

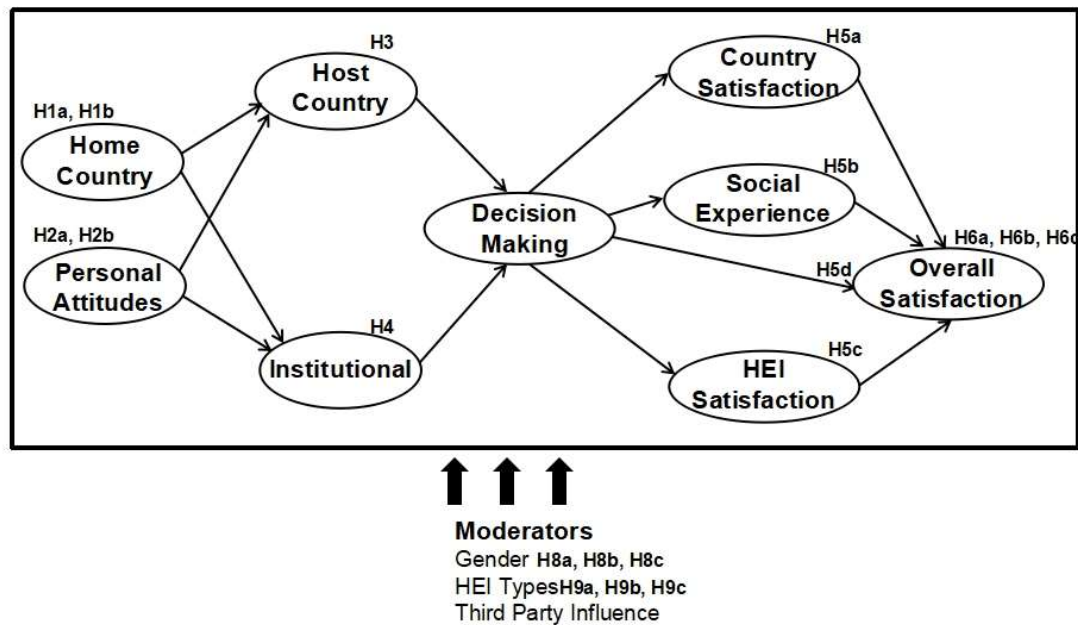


Figure 2.3 Conceptual SEM Model

2.9.1 Key Factors and Research Hypothesis

Based on the review of previous literature, several of the factors identified by the studies were correlated and in fact are items of a latent construct. In this study, exploratory factor analysis (EFA) and the structure equation modelling (SEM) technique are adopted to identify and form latent constructs for the key influencing factors in the conceptual model (as depicted in Figure 2.3) which are home country factors, personal attitude factors, host country factors, and institutional factors. Each key influencing factor is presented by a latent construct with a subset of observed items that were synthesised from past research studies and the relevant literature. The items identified are those verified in previous research and were found to be statistically significant in the context in which they were tested. This approach of identifying the salient attributes through a literature review has been suggested by Hawes and Rao (1985). At least 20 variables were identified from the literature review and a summary of these variables is listed in Table 2.2. The factorability of these items was tested in the exploratory factor analysis (EFA) prior to final model construction in SEM and hypotheses testing. Items that were successfully extracted from the EFA were then grouped accordingly under each factor.

Limited Accessibility to the Home Country's Higher Education System Factor

As discussed in Section 2.5.1, the motivation to study abroad is typically derived from personal (internal) or external factors. The adverse conditions within the home country tend to 'push'

students' to study in another country. Limited accessibility of higher education opportunities is often a consequence of political and/or economic stagnation. This has been the most frequently mentioned external reason causing students to leave their home country for international education. The study thus proposes the following hypotheses:

H1a Limited accessibility to the home country's higher education system is a significant push factor for international students selecting Malaysia as a study destination.

H1b Limited accessibility to the home country's higher education system is a significant push factor for international students selecting a private HEI.

Personal Attitudes Factors

Personal attitudes refer to the intrinsic factors that inspire students' decisions to undertake overseas education (see Section 2.5.1). The top motivations that inspired students' decision to study abroad include the desire for personal development or the perception that foreign qualifications are better. The motivations form the students' initial aspiration to study abroad. Based on this rationale the study proposes the following hypotheses:

H2a Personal attitude factor is a significant push factor for international students selecting Malaysia as a study destination.

H2b Personal attitude factor is a significant push factor for international students selecting a private HEI.

Host Country Factor

The host country factor refers to the country specific characteristics and features that are attractive to international students. The hypothesis proposed for this factor is:

H3 Host country factor is a significant pull factor for international students selecting a private HEI in Malaysia

Institutional Factor

The institutional factor refers to the institutional characteristics and features that appeal to international students. Previous studies recognised a plethora of factors influencing students'

choice of institution. In fact institutional characteristics have been a prominent area of research in the higher education context. The hypothesis proposed for this factor is:

H4 Institutional factor is a significant pull factor for international students selecting a private HEI in Malaysia.

2.9.2 Satisfaction Measures

The higher education service is often experiential (Lewis & Mitchell, 1990) and due to the difference in students' attitudes, the overall study experience for international students is often not the same (Lim et al., 2011). The same reasons that attracted them to an institution and a study destination might not be the same factors that affect their study experience. There are numerous internal and external factors that affect their perception of the service quality received that ultimately will shape their overall satisfaction. This study assesses the satisfaction level of international students towards the decision that they made based on the key influencing factors through the transaction-specific and overall satisfaction approach. Transaction-specific satisfaction is measured in regard to their choice of Malaysia as their study destination, their choice of their private HEI, and their social experience in Malaysia. The students overall evaluation of their experience with the education service they received is then measured. Overall satisfaction differs from transaction-specific satisfaction in that a student may have a dissatisfying experience with the latter and yet still be satisfied with their overall service experience due to their satisfying experience with other service elements (Olsen & Johnson, 2003).

The study proposed the following hypotheses for transaction-specific satisfaction (H5a, H5b and H5c) and overall satisfaction (H5d):

H5a There is a positive relationship between international students' study decision and their satisfaction towards Malaysia as a study destination.

H5b There is a positive relationship between international students' study decision and their satisfaction towards their private HEI.

H5c There is a positive relationship between international students' study decision and their satisfaction towards their social experience in Malaysia.

H5d There is a positive relationship between international students' study decision and their overall satisfaction.

This study also proposed to investigate the relationship between each transaction-specific satisfaction and overall satisfaction to determine the proportion of variance in overall satisfaction being accounted for by the respective transaction-specific satisfaction. Thus the study proposed the following hypotheses:

H6a There is a positive relationship between international students' satisfaction towards Malaysia as a study destination and their overall satisfaction.

H6b There is a positive relationship between international students' satisfaction towards their social experience in Malaysia and their overall satisfaction.

H6c There is a positive relationship between international students' satisfaction towards their private HEI and their overall satisfaction.

2.9.3 Future Word-Of-Mouth (WOM) Behaviour

A satisfied customer believes that the supplier provides goods or services that create specific levels of perceived value with which the customer is likely to remain positively engaged with the supplying organisation, such as repeat purchases or positive customer referrals (Arambewela & Hall, 2003; Wicks & Roethlein, 2009; Slethaug & Manjula, 2012; Bianchi, 2013; Buddhichiwin, 2013; Chong, 2015). The advantage in measuring overall satisfaction is that it then offers the ability to predict student intentions and behaviour. This study investigates the relationship between this satisfaction level and their future WOM behaviour in consumer referrals based on the following hypotheses:

H7a There is a positive relationship between international students' overall satisfaction and their willingness to recommend Malaysia as a study destination through word of mouth.

H7b There is a positive relationship between international students' overall satisfaction and their willingness to recommend their private HEI to others through word of mouth.

2.9.4 Gender

Gender is among the most studied demographic factors in previous literature pertaining to students' choice and decision-making. Similar emphasis has also been placed on researching gender differences in their study experience and satisfaction (see Section 2.7). This study tests for differences in perception of the host country factor and the institutional factor between male and female international students, as well as their overall satisfaction. This test would enhance the practicability of the proposed framework for improved market segmentation prediction. This study proposes the following hypotheses:

H8a There is a significant difference in the perception of the host country factor between male and female international students' decision-making in choosing Malaysia as a study destination.

H8b There is a significant difference in the perception of the institutional factor between male and female international students' decision-making in choosing their private HEI in Malaysia.

H8c There is a significant difference in the overall satisfaction between male and female international students.

2.9.5 HEI Types

Although there are four different types of private HEIs in Malaysia (private university, university college, foreign university branch campus and private college), no prior research studies have investigated differences among students from these different HEIs in their perception of the host country factor and the institutional factor, as well as their overall satisfaction. This would enable HEIs to understand how students decide on the different types of private HEIs in Malaysia that constitute important information for effective marketing and student recruitment strategies. This leads to the proposal of the following hypotheses:

H9a There is a significant difference in the perception of the host country factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing Malaysia as a study destination.

H9b There is a significant difference in the perception of the institutional factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing their private HEI in Malaysia.

H9c There is a significant difference in the overall satisfaction of international students from private universities, foreign university branch campuses, university colleges and private colleges.

2.10 Summary

The comprehensive review of existing empirical studies in this chapter formed the theoretical foundation for this study. Taking the notion of higher education as a marketable commodity, the review of the literature began with validating the stance behind the idea of higher education as a service and students as consumers. The study deduced implications from prominent theories and concepts that are related to students' choice and decision-making. In order to understand how these models and theories have been synthesised over the years, the literature review examined the economic models, the status-attainment models, various combined models, consumer decision-making models as well as the push-pull theory. Subsequently, a comprehensive assessment of thirty empirical studies revealed that decisions pertaining to overseas education are complex. The literature review confirmed that higher education market is not homogenous and overseas education does not provide the same experience for everyone. While exploring issues pertaining to students' satisfaction, the review of past studies also discovered that satisfaction positively shapes international students' behavioural intentions – the word-of-mouth (WOM) effect in recommending their current HEI and the host country. The assessment of past literature also explored on the effect of a third party influence. Parents, relatives and friends, education agents and recommendations from others were among the commonly mentioned influencers in students' decision-making. Evaluation of gender differences in students' choices and decision-making followed next and literature review showed mixed results on gender effect.

The synthesis of empirical literatures eventually conceptualised a research model based on the two most representative student models: the consumer decision-making model and the push-pull theory. The integrated research model was aimed at conceptualising key influencing factors used by international students for higher education at Malaysia's private HEIs. A plethora of factors have been adopted from the review of past studies: i.e. factors motivating

students to study abroad (push factors), factors influencing the choice of study destination, as well as the institution (pull factors). Through the formation of research model, 21 hypotheses were developed for this study. These hypotheses are then subjected to empirical testing through systematic research. The following chapter will discuss on research methodology which was employed in the study

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CHAPTER 3 RESEARCH METHODOLOGY

3.0 Introduction

Chapter 3 presents the research methodology used for this thesis. In this chapter, details about methodology (from research design to the various procedures and methods applied) will be discussed in relation to justifying the entire research process. The chapter begins by comprehensively outlining six research processes that the study had undergone. The choice of survey tool used in this study is explained next. The discussions include justifying how the questionnaire was designed, pre-tested and distributed for data collection. Data preparation process is explained next followed by data screening process. Subsequent discussions focus on various stages of data analysis process undertaken in this study. This study adopts a four-step SEM approach with an aim to reduce a large number of variables and group them into manageable set of factors that eventually forms the structural model for hypotheses testing. The discussions continue to explore on the various aspects of SEM analysis which include SEM requirements, basic SEM steps as well as model fit indices used in the study. Next, discussions on reliability and validity testings are presented. The last part of data analysis comprises of multi-group comparison. Mann-Whitney U Test and Kruskal-Wallis Test are the two non-parametric alternatives used to compare between gender groups and international students across different HEI types. The last part of this chapter addresses the ethical issues pertaining to conducting this research.

3.1 Research Process

In an attempt to address the research objectives, this study was carried out in accordance with the research process outlined by Kumar (2005) and Sekaran and Bougie (2010), which followed a systematic process of six steps 1) literature review; 2) research design; 3) research procedures; 4) data collection; 5) data preparation, which included data coding and screening; and lastly, 6) data analysis process, which explained the analytic tools and methods used in this study.

3.1.1 Literature Review

The review of the literature involved the process of collecting information from mixed resources that were then critically analysed and sorted according to themes and theories. Various resources were obtained from books, industry reports, newspapers, magazines, journal

publications, government reports, as well as official data and information from the internet. In order to have an extensive coverage of all related literature pertaining to this research field, the researcher has accessed electronic databases such as Emerald full text, ScienceDirect, EBSCOhost, VU digital library and ProQuest Direct. A review of past studies allowed the author to identify research gaps, unattempted questions or areas that may have been previously overlooked (Kumar, 2005).

3.1.2 Research Design

According to Buddhichiwin (2013), appropriate research design is essential to ensure quality research outcomes. Accurate data can be obtained through a carefully designed research process that enables researchers to resolve a specific research problem in a more efficient and effective manner (McDaniel & Gates, 2001). A good research design is essential to determine the success or failure of the research (Chisnall, 2001). It is thus important to ensure the adopted research method is aligned with the research questions (Punch, 1998).

A well-designed research process should include a comprehensive plan that outlines all the processes that a study has undergone i.e. from the research approach used for the data collection process as well as the data analysis method (Buddhichiwin, 2013). Typically the research design attempts to explain the ‘what’ and ‘why’ of a study. ‘What’ refers to a descriptive study that is conducted to describe a specific phenomenon (Chisnall, 2005). A descriptive study is usually based on a large sample that is pre-planned and well structured (Malhotra, 1999; Hair et al., 2013). For instance, descriptive research is typically used to describe the variables’ characteristics, such as gender, education level, and household income (Buddhichiwin, 2013). This study is thus descriptive in nature as it proposes to model the selection criteria of international students in order to make implications on how they select a private HEI in Malaysia. ‘Why’ on the other hand refers to exploratory research. In an attempt to answer the ‘why’ questions, exploratory research involves developing a causal explanation. Exploratory study allows a more in-depth discovery of subject matter while pursuing the intended research objectives (Parasuraman, 1991).

3.1.2.1 Research Approach (Quantitative vs Qualitative)

This section explains the research approach used in the study. Quantitative and qualitative research are the two most commonly applied research approaches and each has different characteristics (Buddhichiwin, 2013). The biggest distinction that sets the two approaches apart

relies on the quantification and expression of the data. Data gathered in quantitative studies are normally measured and expressed numerically and used for statistical data analysis (Miller & Brewer, 2003), while qualitative study naturally provides an explanation without using statistical procedures or other means of quantification.

Neuman (1997, p. 63) defined the quantitative approach as ‘an organised method for combining deductive logic with precise empirical observations of individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity’. According to Hoepfl (1997), quantitative research is used to determine a causal relationship, identify a general pattern in order to make a prediction, and eventually to generalise the findings. This approach is commonly used for hypotheses testing with an attempt to test a theory and to unveil the relationship between different variables (Collis & Hussey, 2003; Miller & Brewer, 2003; Bryman & Bell, 2011).

Qualitative research, on the other hand, explains a phenomenon without using statistical procedures or other means of quantification (Strauss & Corbin, 1990). Denzin and Lincoln (2000) broadly defined qualitative research as a multi-method focus that involves an interpretive naturalistic approach to its subject matter. In other words, this approach relies on the researcher to investigate, understand, describe and predict a specific phenomenon based on natural settings that are meaningful to them. Qualitative research is thus context specific in most cases (Patton, 2002). Common methodologies used for qualitative research include interviews, observation, interaction, visual text and historical materials.

There are clear advantages and disadvantages for each research method. The key strength of qualitative research is its ability to predict and reveal multiple phenomena based on people’s different experiences. Researchers may gain more in-depth information about their subjects through a qualitative study. A further distinction of qualitative research is that this approach allows a small sample study; the small number of observations may, however, also be a limitation at the same time. A small sample may restrict the generalisability of the findings. Implications beyond this specific group of participants are restricted.

At the opposite end, the quantitative research allows researchers to apply a systematic approach for investigation. Statistical tools (such as SPSS and SEM) can be used to ease the researcher’s task in analysing the often structured and standardised data (Demand Media Inc., 1999–2012).

However, like the qualitative method, the quantitative approach does have disadvantages. The most obvious limitation of the quantitative study includes the need for a large sample size in order for it to be processed through the statistical tool. Table 3.1 (see below) exhibits the difference between qualitative research and quantitative research.

Table 3.1 Comparison of qualitative and quantitative research

Criteria	Qualitative Research	Quantitative Research
Purpose	To understand and interpret social interaction	To test hypotheses, look at the cause and effect and make predictions
Group studied	Smaller and not randomly selected	Larger and randomly selected
Variables	Study of the whole, not variables	Specific variable studied
Type of data collected	Words, images or objects	Numbers and statistics
Form of data collected	Open-ended responses, interviews, participant observations, field noted and reflections	Structured and validated data collection instruments
Type of data analysis	Identify patterns, features, themes	Identify statistical relationships
Objectivity and subjectivity	Subjectivity is expected	Objectivity is critical
Role of researcher	Researchers and their biases may be known to participants in the study and participants' characteristics may be known to the researcher	Researcher and their biases are not known to participants in the study Participant characteristics are deliberately hidden from the researcher (double blind studies)

Results	Particular or specialised findings that are less generalisable	Generalisable findings that can be applied to other populations
Scientific method	Exploratory or bottom up: the researcher generates a new hypothesis and theory from the data collected	Confirmatory or top down: the researcher tests the hypothesis and theory with the data
View of human behaviour	Dynamic, situational, social and personal	Regular and predictable
Most common research objectives	Explore, discover and construct	Describe, explain and predict
Focus	Wide-angle lens, examines the breadth and depth of the phenomena	Narrow-angle lens, tests a specific hypothesis
Nature of observation	Study behaviour in a natural environment	Study behaviour under controlled conditions; isolate causal effects
Nature of reality	Multiple realities; subjective	Single reality; objective
Final report	Narrative report with contextual description and direct quotations from research participants	Statistical report with correlations, comparisons of means and statistical significance of findings

Adopted from Johnson & Christensen (2008) and Lichtman (2006)

The hypotheses and research framework of this study are derived from various popular students' choices and consumer decision-making (CDM) models and theories that have been widely studied and tested. The intention is to investigate an empirical phenomenon through a conceptual framework established from the integration of these existing theories and models. In this study, subjects are drawn from a large population, namely the international students who are currently studying in a private HEI in Malaysia and inferences about this population are then made. In such circumstances, the quantitative approach is more suitable and was chosen for this study. The quantitative method is appropriate as it focuses on gathering data associated

with an empirical situation for testing and confirming a predetermined theory and hypothesis (Bryman & Bell, 2011).

3.1.2.2 Survey Method

The survey method was used in this study for data collection purposes (Babbie, 1990; Malhotra, 2008). It is the most widely used survey instrument in quantitative research for it is quick, inexpensive, and can also be efficient for administering a large sample (Malhotra, 2008; Zikmund et al., 2010). Surveys can be an accurate method for gathering information from a population in order to ascertain their attitudes, behaviours and characteristics (Zikmund et al., 2010). The survey methods include personal interviews, telephone interviews, mail surveys and online surveys (Babbie, 1990; Hair et al., 2006; Malhotra et al., 2002; Sekaran & Bougie, 2010; Zikmund et al., 2010). Each of these methods has its unique features as well as limitations (Malhotra et al., 2002; Zikmund et al., 2010). To select an appropriate survey method depends on the research objectives and the research design of the study (Hackett, 1981).

A questionnaire survey was used in this research to measure the attitudes of the international student respondents towards the selection criteria they used in selecting HEIs for studying abroad. The questionnaire survey is one of the most popular and widely used survey instruments across the social sciences (Burton, 2000), business studies (Ghauri et al., 1995), and hospitality and tourism research (Altinay & Paraskevas, 2008). Questionnaires are commonly used to collect respondents' personal characteristics, opinions, behaviours and attitudes (Altinay & Paraskevas, 2008). This survey tool is descriptive in nature and is suitable to collect data of 'what' and 'how much'; for instance, a questionnaire can be used to determine to what extent certain factors influence student choice (Remenyi et al., 1998; Sekaran, 2000). For the purpose of this study, both online and offline questionnaires were used. Mail questionnaires were distributed to respondents at numerous private HEIs in the Klang Valley area. This method allowed the researcher to effectively reach out to a large random pool of potential respondents. As the questionnaires were handed to students in person, it allowed the researcher to respond to respondents' queries on the spot. According to Hair et al. (2006), personal contact and interaction between respondents and interviewer may improve communication, which helps to increase the response rate for a study. A web survey was also created as an alternative to reach out to respondents whom the researcher could not otherwise meet.

3.1.3 Survey Procedures

The following section discusses the research instrument development process. This includes the sampling strategy, questionnaire development and pilot testing.

3.1.3.1 Sampling Strategy

The target population of this study was international students who are currently enrolled to private HEIs in Malaysia. Malaysia is currently host to 126,589 international students from more than 100 countries. Eighty per cent of international students are enrolled in private institutions, and based on Malaysian government records the Klang Valley area has the highest number of private HEIs (Ministry of Higher Education, 2018). Taking that into consideration, random cluster sampling was employed for this research. Institutions were randomly selected from the four types of private HEIs (clusters): private university, university college, foreign university branch campus and private college within the Klang Valley area.

3.1.3.2 Questionnaire Development

According to Hair et al. (2006), designing a questionnaire survey involves the process of formatting established sets of scale measurements into an instrument for collecting raw data from respondents. The following discussions focus on questionnaire construction and presentation.

The questionnaire had 28 questions and was divided into six sections (see Appendix A). Section A consisted of only one question where the respondents were asked to identify what motivated their intention to study abroad. There were 24 items in this question, which respondents were required to rate regarding the extent to which these statements initiated their decision to study overseas. These items were mainly a reflection of home country conditions or personal motivations and were adopted from past studies that were researched from a similar field.

Section B of the questionnaire aimed to investigate why respondents chose Malaysia as their study destination. There were three questions in this section. The section began by asking if Malaysia was their first choice of study destination. Next, respondents were asked what other country (if any) they had also considered. The third question then required respondents to rate the 26 country characteristics that attracted them to study in Malaysia.

Section C examined the institutional variables that students valued most. This section aimed at discovering the key influencing factors affecting international students to select their private HEI. There were also three questions in the section. The first question asked if the current institution was their first choice of HEI, followed by investigating what other institutions the students may have also considered. The last question in this section then required students to rate the 32 HEI characteristics that have constituted their current choice of private HEI in Malaysia.

Section D consisted of five questions and was aimed to examine the third party influence on international students' choice and decision-making. In this section, students were asked to identify the source of information they referred to, as well as the role of these reference groups in shaping their choices and decisions.

The subsequent section (Section E) then explored the international students' satisfaction level and to what extent their expectations had been met. Four satisfaction questions were asked. The first question had 6 items that aimed to determine respondents overall satisfaction level. The subsequent two questions had 11 and 22 items respectively with the intention of investigating respondents' satisfaction towards Malaysia as a study destination, as well as the HEI they were currently enrolled in.

The final section of the questionnaire was designed to collect the demographic information of the respondents, such as country of origin, age, gender and level of study, source of financial support and household income.

All items used in the questionnaire (Section A to Section E) were adopted from past studies in similar fields (Americanos, 2013; Bianchi, 2013; Buddhichiwin, 2013; Cheng et al., 2013; Kitsawad, 2013; Cao, 2014; Chia, 2014; Wu, 2014). Wherever possible, initial scale items were adopted directly from these studies as the items had already been validated. The purpose was to make the constructs more distinguishable and measurable for theory testing (Malhotra, 2008). Some items were reorganised to suit the context of this study. For instance, the host country related items were structured to reflect Malaysia's context.

The cover sheet of this questionnaire contained instructions to respondents. The research objectives, questionnaire structure and requirements, benefits of participating in this study, as

well as the contact details of the researcher, were explained on the cover sheet. To prevent repeated participation, a filter question was asked. For a mail survey, the filter question was included on the cover page and respondents were requested to participate only once in the survey. In Qualtric (web survey platform), repeat participation can be prevented through a skip logic question (filter question). Online respondents were only allowed to proceed if they meet the logic criteria. In addition, extra prevention was taken to screen out repeat participation. The researcher selected an option in Qualtric that compares the host name or internet protocol (IP) addresses of the submission source. As every computer has a unique IP address on the internet, Qualtric can prevent a user from participating in the web survey more than once. If they answer the skip logic question that they have already taken the survey, they will automatically be excluded from the survey.

3.1.3.2.1 Measures

This study adopted three levels of measurement scales: nominal, ordinal and interval. Nominal data are categorical and have no numeric value (Straker, 2002–2011); this kind of data is used to describe something such as gender group in this study. Ordinal scales are suitable to present data that are in sequential order. For instance, age group, household income, education level are ordinal data (Straker, 2002–2011). Interval scales are used to measure the subjective characteristics of respondents. In this study, interval scales were used to discover respondents' decision-making processes for selecting a private HEI in Malaysia.

A 7-point Likert scale was used in the questionnaire for measuring students' responses. Respondents were asked to rate statements in Section A to Section D, where a value of 1 indicated 'strongly disagree', 2 'disagree', 3 'somewhat disagree', 4 'neither agree nor disagree', 5 'somewhat agree', 6 'agree', and 7 'strongly agree'. A similar scale has been applied to Section E to measure respondents' satisfaction level; where a value of 1 referred to 'completely dissatisfied', 2 'mostly dissatisfied', 3 'somewhat dissatisfied', 4 'neither satisfied nor dissatisfied', 5 'somewhat satisfied', 6 'mostly satisfied', and 7 'completely satisfied'. The Likert scale measures in this study were adopted from Vigias and Wade (2006).

The Likert scale is a common method used for making valuable and meaningful conclusions in business research (Sekaran & Bougie, 2010). The Likert scale helps researchers manage quantitative data by assigning values to attitudes, which makes the data amendable to statistical analysis. The numerical number assigned to each potential choice enables researchers to

calculate a mean figure for all responses. This study adopted a 7-point scale, as a broader scale allows for greater discrimination and finer distinctions in the data (De Vaus, (2002). This is consistent with the Russell and Bobko (1992) study that a broader scale can better reflect a respondent's true subjective evaluation in a robust questionnaire than the 5-point Likert scale. A similar discovery was also reported in a study by Finstad (2010). Zikmund et al. (2010) indicated that the sensitivity of a Likert scale could be increased by allowing for a greater range of possible scores.

3.1.3.3 Pilot Testing

After designing the questionnaire, it was piloted to ensure that the instrument would work in the field. Pilot testing is a means to capture feedback from participants to ensure that the questions and instructions operate well; the respondents can understand the content correctly and the questionnaire flows well (Bryman, 2004; Veal, 2005; Altinay & Paraskevas, 2008). Altinay and Paraskevas (2008) suggested that a questionnaire should be tested with a small number of participants on a convenience sampling basis.

Taking the recommendations from these researchers, a pilot test was carried out one week prior to the official data collection process. The pilot test aimed to determine the structural validity and clarity of the questionnaire, ensuring the reliability and appropriateness of the variables adopted from previous studies. A similar approach has been used in numerous studies (Mazzarol & Soutar, 1999; Joseph & Joseph, 2000; Soutar & Tuner, 2002; Brown & Mazzarol, 2009). In this study, the questionnaire was piloted through a focus group with eight international students on a convenience sampling basis, as suggested by Altinay and Paraskevas (2008). Students were asked to comment on general aspects of the questionnaire, such as layout, order of the questions, number of questions, wording and instructions of the questionnaire at the end of the focus group. The questionnaire completion time per respondent was approximately 22 minutes. No major concern was raised in terms of difficulty in understanding the questions and instructions. Two participants raised their concern regarding the lengthiness of the questionnaire and commented that the survey was too time-consuming. The researcher decided no modification was required after the pilot test. Even though the questionnaire survey was long, the lengthiness was unavoidable as the questionnaire was designed to capture the various aspects of international students' study experience, from factors affecting their choices to factors affecting satisfaction. Among other information conveyed to the respondents at the start of the actual survey, respondents were informed of the estimated

duration of the survey, participation in the survey is voluntary and also they are free to terminate their participation at any time. All respondents in this study were duly informed according to Victoria University's requirements.

3.1.4 Data Collection

The official data collection took place from 12 July 2016 to 24 August 2016. The final survey was distributed via both the online (web survey) and offline (mail questionnaire) methods. Invitations to participate were sent to institutions and the necessary arrangements were finalised with participating institutions two weeks prior to the data collection process. A total of 725 responses were collected from 29 private HEIs.

3.1.4.1 Mail Questionnaire Survey

During the data collection period, the researcher visited two to three institutions a day. Mail questionnaires were either handed to students during classes or were mailed to the institutions with return addressed envelopes provided. The survey mainly took place during classes or at the common areas within the institution compound (library, lab and café). All respondents were randomly approached and several questions were asked prior to the survey to ensure they were appropriate subjects for the study: the researcher briefly asked if they were international students currently studying in the HEI, their duration in Malaysia, as well as the type of course in which they were enrolled. Respondents were also asked if they had participated in the survey before in order to ensure that no respondent was repeated. On fulfilling these criteria, respondents were handed the questionnaire survey.

3.1.4.2 Web Survey (Qualtrics)

A web survey (Qualtrics) supported by Victoria University was used to reach out to respondents whom the researcher could not otherwise approach. An email invitation with the URL of the web survey was sent to various HEIs that had turned down the mail survey invitation. The institutions were requested to forward the invitation to encourage participation of their international students with the web survey.

3.1.5 Data Preparation

After data had been collected, the next important step was to prepare the data for analysis. It is essential to ensure the completeness and accuracy of the data prior to conducting any analysis, particularly the factor analysis and SEM analysis. Hence the research undertook several audit

checks in data coding and screening to ensure that no error was made in the data preparation process prior to analysis (Byrne, 2000; Tabachnick & Fidell, 2006; Hair et al., 2010c).

3.1.5.1 Data Coding

Data analysis began with a process of coding and editing the questionnaire responses into SPSS. Prior to coding, each item in the questionnaire was assigned a unique variable name that could clearly identify information such as age, gender, level of study, household income, and so forth. The coding sheet summarising all the coding instructions and essential information about the variables in this survey data set is provided in Appendix B. After eliminating incomplete responses, 697 collected questionnaires were coded into SPSS.

3.1.5.2 Data Screening

Data screening is to ensure maximum data accuracy (Malhotra, 2008) and according to Hair et al. (2010c), data screening can be undertaken in four steps, which includes an evaluation of missing data, assessment of data normality, identification of outliers and assessment of multicollinearity. Any error in data, such as missing values or extreme variations in values, can result in incorrect interpretation of the data, and yield biased results for the study.

3.1.5.2.1 Missing Data

Missing data are the values of variables that are unavailable for analysis (Hair et al., 2010b). According to Malhotra (2008), missing data can happen either as a consequence of the researcher or respondents' actions. For instance, the researcher might not have recorded the respondents' responses correctly, or in some cases it could be due to the respondents' reluctance in providing answers, especially if the questions are highly sensitive. There are several common practices to treat missing values. The popular solution is to retain the missing value, as it is, especially when the number of missing data is small and non random. The researcher can otherwise choose to remove cases with the missing values or to replace the missing values (imputation). In this study, the researcher removed 11 that contained missing values, leaving the sample size with 686 responses.

3.1.5.2.2 Univariate Normality

Skewness and kurtosis must be tested to ensure univariate normality. Skewness describes how unevenly the data is distributed with a majority of the score. Positive skew refers to the scores below the mean and negative skew indicates the opposite (Kline, 2015). Kurtosis, on the other

hand, refers to the shape of the peak in the distribution of data. A positive kurtosis (leptokurtic) shows a heavier tail and a higher peak, while a negative kurtosis (platykurtic) indicates the opposite. Skewness and kurtosis can either happen separately or together in the same variable (Kline, 2015). To test for univariate normality, skewness and kurtosis were calculated using the descriptive/explore analysis in SPSS.

3.1.5.2.3 Multivariate normality

It is a prerequisite in SEM for data to be normally distributed because non-normal data will reduce the reliability of SEM (Kline, 2015). This means that all data are univariate distributed, all joint distributions of any pair of variables are bivariate normal, and all bivariate scatterplots are linear with homoscedastic residuals. Removing outliers will improve the normality of data. The discussion on outliers was presented in the next section, followed by solutions on resolving univariate and multivariate outliers. Once outliers were removed, the study re-ran the normality test for all models in AMOS using Mardia's test (Mardia, 1985). When Mardia's coefficient was greater than 5, it was an indication of multivariate non-normal distribution of data. Bollen-Stine bootstrapping was then applied to correct the non-normality. Bootstrapping is an approach to estimate standard errors in regression analyses without making any distribution assumptions (Chernick, 1999). The purpose of the Bollen-Stine bootstrap was to correct the standard error and fit statistics bias that occurred as a result of non-normality. The process involved repeatedly resampling the sample population with replacements to approximate what would happen if the entire population were sampled. The number of bootstrap samples used in this study was 5000. If the Bollen-Stine outcome showed that each item in the model remained statistically significant at 5% level of significance ($p > 0.05$), there was insufficient evidence to reject the hypothesised model and thus the suggested model is a good fit.

3.1.5.2.4 Outliers

Outliers are cases with extreme scores that are very different from the rest (Kline, 2015). In order to improve the normality of data, outliers should be removed. The two types of outliers are: univariate and multivariate outliers. The univariate outlier happens within a single variable. In this study, univariate outliers were detected by inspecting the frequency distributions of the z-score. Cases with a z-score greater than 3.29 standard deviation were eliminated (Shiffler, 1988). This resulted in 149 cases being removed. The multivariate outlier, on the other hand, has extreme scores of two or more variables. For the purpose of this study, Mahalanobis Distances (D^2) statistic was used to detect multivariate outliers. This statistic measures the

distance in standard deviation units between a set of scores for an individual case and the sample means for all variables (Tabachnick & Fidell, 2006). A relatively high D^2 with a low p value ($p < 0.001$ for the χ^2 value) indicates a multivariate outlier and the case should be removed from the sample. One hundred and two (102) multivariate outliers were deleted, yielding the final sample of this study to be 435 cases.

3.1.5.2.5 Multicollinearity

According to Hair et al. (2010b, p. 93), multicollinearity is ‘the extent to which a variable can be explained by the other variables in the analysis’. It occurs when variables are very highly correlated. An inspection of the correlation matrix for the independent variables helps to identify multicollinearity. When correlation estimates are 0.90 and above, it is an indication of multicollinearity (Hair et al., 2010b) and it implies that there is redundant information of variables in the same analysis (Byrne, 2000; Tabachnick & Fidell, 2006; Kline 2015). When two variables are multicollinear, the role of each independent variable will be affected and so is their ability to predict the dependent measure (Hair et al., 2010b). The evaluation of multicollinearity was performed using a one-factor congeneric model analysis, as well as the construct validity of the full measurement model that will be explained in the coming sections.

3.1.6 Data Analysis Process

The Statistical Package for the Social Sciences (SPSS) version 24 and Analysis of Moment Structures (AMOS) version 24 were the statistical tools used in this study. Descriptive analysis and reliability tests were conducted using SPSS, while the factor analysis and structural model analysis were performed in AMOS.

3.1.6.1 Descriptive Analysis

Data analysis began with descriptive analyses conducted to 1) identify the demographic profiles of the respondents; 2) determine the shape of data distribution; 3) check for missing values; as well as 4) detect univariate outliers. SPSS was the tool to perform these descriptive analyses. Interpretation of data was carried out through basic statistical techniques, such as frequencies, means, minimum/maximum, standard deviations and data distribution (Pallant, 2011).

3.1.6.2 Four-step Modelling Analysis

This study adopted a four-step modelling approach. The first step began with an exploratory factor analysis (EFA). This was a preliminary step intended to examine whether items of a construct share a single underlying factor prior to confirming the unidimensionality of those constructs in confirmatory factor analysis (CFA). Principal axis factoring (PAF) with the direct oblimin rotation method was the chosen method for EFA and the analysis was performed using the SPSS. EFA is often used in the early stages of research when the researcher is uncertain about the interrelationships among a set of variables (Pallant, 2011). For the purpose of this study, a plethora of variables was tested, and through EFA, it gave a rough idea of which items held together as a construct. The large number of variables was reduced when similar variables were grouped into a more manageable set of factors (Wheeler et al., 2004; Zikmund, 2009).

A correlation matrix was used to assess sampling accuracy in the EFA analysis. This matrix is an indication of the correlation degree between different variables or similarities between variables (Wheeler et al., 2004). For the purpose of this study, the two correlation matrix measures used in EFA are: Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. The KMO value ranges from 0–1; 0.6 is deemed the minimum value required (Pallant, 2011). Bartlett's test of sphericity, on the other hand, must have probability-tested significance at ($p < .05$). In addition to this, a large sample size is essential in ensuring the reliability of the correlation matrix. According to Bryman and Cramer (2005, p. 326) 'there is no consensus on what the size should be'; a study, however, 'should have more participants than variables'. Ryan (1995) suggested that the minimum sample size be 150 and should not have fewer than 10 variables. Pallant (2011) recommended that the larger the sample size, the better it be. With a final sample size of 435, this study was appropriate for EFA analysis.

Eigenvalue was then used to determine the number of factors to be retained and excluded because eigenvalue represents the amount of total variance explained by a factor. Eigenvalue was then used to determine the number of factors to be retained and excluded because eigenvalue represents the amount of total variance explained by a factor. In every factor analysis, each factor captures a certain amount of the overall variance in the observed variables. Any factor with Eigenvalue greater than 1 explains more variance than a single observed variable, which means that a substantial amount of variance is explained and that factor should be retained (Field, 2005). On the other hand, an eigenvalue of less than one is considered insignificant and the factor should be disregarded (Hair et al., 1998; Bryman & Cramer, 2005).

Based on recommendation, eigenvalue greater than 1 was used to decide which factors to retain in this study.

Once EFA had been identified as the possible construct for the study, the next step was to confirm these factors through the confirmatory factor analysis (CFA) in AMOS. This was to ensure reliability and validity of the measuring instruments prior to conducting a structural model analysis. The process began with a one-factor congeneric model analysis to ensure the unidimensionality of each construct, followed by the measurement model (also known as the multi-factor model) analysis. The one-factor congeneric model or a unidimensional model is the simplest form of measurement model that represents 'the regression weights of the set of observed indicator variable on single latent variable' (Holmes-Smith et al., 2006, p. 6-1). According to Hair et al. (2010a), each observed variable should only be represented by one latent variable, and congeneric modelling assumes that each indicator measures the same latent variable with possibly different scales, different degrees of precision and different errors. Therefore a one-factor congeneric model can demonstrate the best fit of the model when observed variables associated with the construct are valid. Once all one-factor congeneric models had been tested, these constructs were combined into multi-factor models. Multi-factor model analyses were then carried out to ensure the measurement models adequately explained the sample data and there was no factor cross loading. The multi-factor models were evaluated based on the measurement model validity (see section: Reliability and Validity). The final step involved putting together all components to form a structural model and testing the feasibility of the model. Hypotheses of the study were tested after the identification of structural paths. CFA was the chosen method as it is capable of testing (confirm) specific hypotheses or theories concerning the structure underlying a set of variables through a complex and sophisticated set of techniques (Pallant, 2011).

3.1.6.3 Structural Equation Modelling

Structural equation modelling (SEM) was the statistical tool used for data analysis in this study. SEM is a sophisticated tool capable of investigating relationships between independent and dependent variables simultaneously (Bollen, 1989; Hair et al., 1998; Rakov & Marcoulides, 2000). SEM allows a repeat test of regression equations simultaneously and it also permits examination of more complex relationships and models. It is also capable of identifying and explaining the underlying relationship between the variables. The capabilities of this tool are appropriate for addressing the research objectives of this study. Results generated from SEM

reveal whether the conceptual model of this study fits the Malaysian context and whether it is aligned with previous studies. Additionally, SEM will also identify if any of the variables have changed or evolved from prior theoretical models (Chin et al., 2008) in the event that a significant new trend might now be driving the students' choice and decision-making process.

3.1.6.3.1 Sample Size for SEM Procedures

SEM is an analytic technique that requires large sample sizes (Kline, 2015). According to Kline (2015), it is difficult to determine what is large enough for a sample size as there are many factors that might affect the sample size requirement. The author gave examples of several conditions that require a larger sample size: 1) when a model is complex with a lot of parameters; 2) when the reliability score and precision of data are low; 3) when factor analysis has relatively fewer indicators per factor; and 4) when the outcome variables of an analysis are continuous and normally distributed. Even though Kline (2015) suggested that given all of these influences it is difficult to determine an absolute meaningful minimum sample size, the author thus put forward 'the typical' sample sizes in SEM studies. A median sample size should be 200 cases, and when sample size is less than 100, the model will be untenable (Kline, 2015). Hair et al. (2005) supported 200 to be an ideal sample size. Taking into consideration the aforementioned suggestions, a final sample size of 435 respondents falls within the acceptable range of sample sizes.

3.1.6.3.2 SEM Procedures

This study employed the five basic steps of the SEM procedure recommended by Schumacker and Lomax (2004).

1. Model specification specifies the parameters to be estimated in the analysis, such as the regression coefficient, sample variance, residual variance in dependent variable, and the error variance associated with the observed variables. According to Kline (2015), this is the most important step as the later steps in SEM modelling assume that the specified model is correct.
2. Model identification is a confirmation process to ensure that the model specified is theoretically possible to uniquely estimate all model parameters. Unknown model parameters are equated with known variances, as well as covariances in the measured variables. The model is deemed unidentified if the number of parameters to be estimated in a model exceeds the number of variances and covariances in the measurement (Coote, 2012).

3. The model estimation involves using an SEM tool to conduct the analysis. For instance, the maximum likelihood method (ML) is one of the most widely used approaches due to its ability to provide an estimation of the approximate value for each parameter that may have more than one possible solution. According to Schermelleh-Engel et al. (2003), the parameter estimates and standard error generated through this method are typically asymptotically unbiased, consistent, and efficient. It is important to note that the ML method assumes the observed data to be of multivariate normality in order to yield correct standards for the parameter estimate and provide an overall fit of statistical values that are asymptotic based on chi-square distribution (Jöreskog, 1967; Schermelleh-Engel et al., 2003).
4. The fourth step is to assess the model fit by checking whether the specified model fits the data. A model fit is the degree to which the sample variance-covariance data fits the structural model (Schumacker & Lomax, 2004). The statistical measures used for the assessment of the model fit will be explained in the next section. Assuming that the specified model achieved satisfactory fit, the following step is to accurately report the results (Kline, 2015).
5. However, in most cases, researchers are required to respecify their initial model due to poor fit. Model re-specification involves making necessary modifications to the model to improve its fit to the data. Model modification includes examining and fixing the critical ratios, the standardised residuals and modification indices to improve the poor fit of the data (Schumacker & Lomax, 2004).

3.1.6.3.3 Model Fit Criteria

Model fit evaluation is a reflection of how well a specified model reproduces the covariance matrix among the observed variables (Hair et al., 2010c). The two types of global fit statistics to evaluate the model fit are: the model test statistics and the approximate fit indexes (Kline, 2015). As there is no one single index that can perfectly predict a model in SEM (Hair et al., 1992; Kline, 2015), a combination of fit indexes will provide more detailed and accurate evaluation of the model fit (Kline, 2015).

3.1.6.3.3.1 Model Test Statistics

1. Chi-Square χ^2

The chi-square χ^2 test is the original fit statistic used in SEM (Hair et al., 1992; Kline, 2015). It is an accept-support test that is opposite from the typical reject-support test where researchers seek to reject the null hypothesis ($p < 0.05$). For the chi-square test, the specified

model is assumed to be correct and thus failure to reject the null hypothesis or the lack of statistical significance of $p > 0.05$. This test is generally weaker due to its inability to disprove the exact fit hypothesis (Steiger, 2007) resulting in a Type II error (Steiger & Fouladi, 1997). This is particularly true when the sample size is small, hypotheses are less likely to be supported and eventually lead to a false model (Kline, 2015). On the other hand, Schumacker and Lomax (2004) claimed that the χ^2 statistic has the tendency to indicate a significant probability with a low p value that shows model poor fit when the sample size is big (larger than 200). Non-significant χ^2 statistics are one of the most difficult goodness-of-fit indices to achieve, since the χ^2 statistic normally accounts for all possible relationships between constructs and indicators in a model (Cheng, 2001). According to Byrne's (2000, p. 76) 'findings of well fitting hypothesized models, where the χ^2 value approximates the degree of freedom, have proven to be unrealistic in most SEM empirical research'. Due to the sensitivity of chi-square towards sample size, alternative fit indexes should be used for model fit assessment (Schumacker & Lomax, 2004).

3.1.6.3.2 Approximate Fit Indexes

Next are the approximate fit indexes, which are the continuous measures of model-data correspondence (Kline, 2015). There are four categories of approximate fit indexes to describe the fitness of data to model: incremental fit indexes, absolute fit indexes, parsimony-adjusted indexes and predictive fit indexes. These indexes can either be scaled as 'goodness of fit' measures where higher values indicate better model fit, or some measures are scaled as 'badness of fit' statistics which indicate the opposite (the higher the value, the worse fit of data to model) (Kline, 2015). The following sections discuss the approximate fit indexes used in this study for model fit evaluation.

1. Incremental Fit Indexes

Incremental fit indexes measure the relative improvement in fit of the specified model over the null model. The incremental fit index used in this study is comparative fit index (CFI).

● Comparative Fit Index (CFI)

CFI, or the Comparative Fit Index, was used in this study as it is regarded as the improved version of the normed fit index. In fact this incremental fit index has been a more popular and current goodness-of-fit statistic used in recent decades of research (Bentler & Bonett, 1980, 1987, 1992). The CFI is 'a ratio of the difference in the χ^2 value for the proposed

model and a null model divided by the χ^2 value for the null model' (Hair et al., 2010c, p. 749). It takes sample size into consideration by comparing the hypothesised model with the null model (Bentler, 1990). CFI has a value range from 0 to 1.00 and as it is scaled as a goodness-of-fit statistic, a CFI value = 1.00 indicates the best result. In general, the recommended value of CFI is to be greater than 0.90 to indicate a well-fitting model (Bentler, 1992; Hu & Bentler, 1999). This recommended threshold of CFI ($CFI > 0.90$) was used in this study.

2. Absolute Fit Indexes

Absolute fit indexes measure how well a priori model explains the data. The two absolute fit criteria used in this study are the root mean square error (RMSEA) and the standardised root mean residual (SRMR).

● Root Mean Square Error of Approximation (RMSEA)

The next fit statistic used in this study is the root mean square error of approximation (RMSEA). This fit criterion was first proposed by Steiger and Lind in 1980 and since then has been regarded as one of the most informative fit statistics in covariance structural modelling. RMSEA represents how well a model fits a population by taking into consideration the error of approximation in the population (Brown & Cudeck, 1993; Hair et al., 2010c). Taking the sample size into account, RMSEA estimates the amount of error of approximation and expresses the discrepancy per degree of freedom (Kline, 2005). This attempt makes RMSEA sensitive to the number of parameters estimated in the model and it corrects the tendency of the chi-square test statistic to reject any model that has a large sample or a large number of observed variables. RMSEA is an absolute fit index scaled as a badness-of-fit statistic where a value of zero indicates the best result. An RMSEA value less than 0.05 indicates a good fit; a value between 0.05 and 0.08 represents reasonable errors of approximation in the population (Browne & Cudeck, 1992); whilst MacCallum et al. (1996) suggested that a value between 0.08 and 0.10 reveals a mediocre fit; and finally, a value greater than 0.10 indicates a poor fit. While Browne and Cudeck (1992) and MacCallum et al. (1996) argued that RMSEA is a more realistic fit index, it is important to note that as RMSEA is sensitive to sample size, a small sample size will result in RMSEA over-rejecting true population models (Fan et al., 1999). Despite the limitation, MacCallum and Austin strongly recommended the use of RMSEA for model fit assessment as it is sensitive to model misspecification (Hu & Bentler, 1998). According to Hu and Bentler (1998, 1999), RMSEA

yields a more appropriate model fit as it relies on commonly used interpretive guidelines. For instance, it is possible to build confidence intervals around RMSEA i.e. AMOS reports a 90% interval around RMSEA value and therefore provides a more accurate evaluation of the model fit (Steiger, 1990).

● **Standardised Root Mean Square Residual (SRMR)**

The next fit statistic is the standardised root mean square residual (SRMR). Like RMSEA, SRMR is also an absolute fit index that measures the mean absolute correlation residual, the overall difference between the observed and predicted correlations (Kline, 2015). In other words, SRMR represents the average standardised residual value derived between the sample variances and covariances and the estimated population variances and covariances (Tabachnick & Fidell, 2006). SRMR has a value range from 0 to 1.00, and as SRMR is a badness-of-fit statistic, a lower value of SRMR is more desirable. The SRMR value for a good fitting model should thus be less than 0.10, according to Kline (2005, 2015).

This study adopted the set of fit statistics recommended by Kline (2015). It consisted of a model test statistic and three approximate fit indexes. The fit statistics used are the chi-square with its degrees of freedom and *p* value, CMIN/df, CFI, RMSEA and SRMR. The recommended thresholds for each fit statistic were listed in Table 3.3.

Table 3.2 Recommended threshold for fit statistics used in the study

Model Fit	Recommended Threshold
X²/df	< 3
P value	> 0.05
CFI	> 0.90
RMSEA	< 0.05
SRMR	< 0.1

3.1.6.4 Reliability and Validity

Reliability refers to the precision of a sample (Kline, 2015), which indicates how free the scale is from random errors (Pallant, 2011). The score reliability can be estimated through the coefficient alpha, also known as the Cronbach's alpha (α). Cronbach's alpha is a statistical tool capable of measuring the internal consistency of the data (Schumacker & Lomax, 2004; Kline,

2015) in order to ensure that items measure the same across the scale (Kline, 2015). In other words, Cronbach's alpha is an indication of the average correlation among items in that measurement scale. Kline (2015) suggested that there is no gold standard for how high the reliability coefficients should be, but in general, a Cronbach's alpha of 0.70 or above is adequate. Coefficient values of 0.80 and above are 'very good', whilst 0.90 and above are considered 'excellent'. Low score reliability i.e. coefficient below 0.70 indicates the item does not sufficiently capture the construct. However, if the sample size is large enough, a lower level of score reliability is acceptable, according to Little et al. (1999).

Validity, on the other hand, refers to the soundness or the plausibility of the measurement scale indicating how accurate the scale is in achieving its intended aims (Pallant, 2011; Kline, 2015). Construct validity is widely used to validate a measurement scale. It is the extent to which a set of measured items actually reflects the theoretical latent construct of items that they are designed to measure (Hair et al., 2010a; Kline, 2015). In other words, evidence of construct validity provides a good measure of model fit, and suggests that items in the model measure the theory accurately (Hsieh & Hiang, 2004). According to Pallant (2011), construct validity is tested through an overlapping test of convergent and discriminant validity, an evaluation process that concurrently measures against each other instead of an external standard. A set of variables is presumed to measure the same construct showing convergent validity. The intercorrelations must be appreciable in magnitude according to Kline (2015). Likewise, if the intercorrelations are not too high, the set of variables is presumed to measure different constructs, thus indicating discriminant validity (Kline, 2015). Discriminant validity is the extent to which a construct is unique and truly different from other constructs. Each construct should capture some phenomena that are not captured by other constructs (Hair et al., 2010a).

The above-mentioned discussions affirmed that even though reliability and validity are not the same, they are closely related (Bollen, 1989). While reliability measures the consistency and stability of a scale, validity examines the accuracy of the scale (Schumacker & Lomax, 2004; Kline, 2015), ensuring that the right information is captured (Sekaran & Bougie, 2010). According to Kline (2005, 2015), it is possible for a measurement scale to be valid but not reliable or vice versa. It is thus important to test and validate each scale to ensure high quality and the credibility of the research findings (Pallant, 2011). To measure the score reliability of the initial set of constructs in EFA, this study examined Cronbach's alpha of the items in SPSS. All constructs should have Cronbach's alpha exceeding 0.70, as suggested by Kline (2015).

For CFA analysis in SEM, the measurement models were tested for convergent and discriminant validity in AMOS.

Convergent validity can be assessed by reviewing the items' factor loadings, average variance extracted (AVE), as well as construct reliability (Hair et al., 2010a).

● **Factor Loadings**

The test for convergent validity suggests that all items that measure a common factor should all achieved high standardised loadings (Kline, 2005). A general rule of thumb for factor loadings of items relevant to a construct should be at least 0.50 or higher (Hair et al., 1998). High factor loading is an indication that all the scale items are strongly related to their associated constructs.

● **Average Variance Extracted (AVE)**

The value of average variance extracted (AVE) is a summary of convergence validity. It is calculated as the mean variance extracted for the items loading on a construct (Hair et al., 2010a). Bagozzi and Yi (1988) and Hair et al. (1998) suggested that AVE should have a value 0.50 or higher to indicate adequate convergent validity.

● **Reliability**

In SEM, construct reliability (CR) and squared multiple correlation (SMC) were used as an additional measure of convergent validity. SMC was used to assess item reliability and CR value for construct reliability. Bagozzi and Yi (1988) suggest that CR value should be equal or greater than 0.6, and for item reliability, Robinson et al. (1999) suggested that SMC should exceed 0.50. SMC indicates the variable's variance explained by a latent variable (Kline, 2015) and items with SMC below 0.50 should be eliminated.

Discriminant validity can be assessed by examining the correlations between latent constructs. A correlation above 0.85 simply means that constructs are highly correlated and hence suggests a lack of discriminant validity (Kline, 2010). However, Hair et al. (2010a) disagreed by stating high correlations at 0.90 between constructs can still produce significant differences in fit between two models. Hu and Bentler (1999) suggested comparing AVE values with the maximum shared variance (MSV) to prove discriminant validity. The maximum shared variance (MSV) should be smaller than the average variance extracted (AVE) for each

construct ($MSV < AVE$) and the square root of AVE should be greater than any inter-factor correlations (Hu & Bentler, 1999).

3.1.6.5 Multi-group Comparison using Mann-Whitney U Test and Kruskal-Wallis Test

For a multi-group comparison (gender and HEI types), this study adopted the Mann-Whitney U Test and Kruskal-Wallis Test using the SPSS. The Mann-Whitney U Test is a non-parametric alternative used to test for differences between two independent groups (such as male and female). It is an alternative to the t-test for independent samples and the test uses the median of the comparing groups to associate with a continuous variable (Coakes et al., 2010). The process involves comparing the rank values of two groups. If the p value is less than 0.05, it indicates both groups are significantly different or vice versa (Pallant, 2011). The Mann-Whitney U test was used in this study to test if there was any significant difference between male and female international students choosing a private HEI in Malaysia. The same test was also used to investigate if respondents of different gender exhibited different levels of satisfaction in their study experience.

Likewise the Kruskal-Wallis Test is also a non-parametric alternative and it was applied to explore for differences across different types of HEIs in this study. The non-parametric Kruskal-Wallis Test is equivalent to a one-way between groups analysis of variance. Similarly to the above, the scores for each group are converted to ranks and the mean rank for comparison purposes. A p value less than 0.05 indicates both groups are significantly different, according to Pallant (2011).

3.1.7 Ethical Considerations

According to McGivern (2003, p. 355), it is the researcher's responsibility 'to ensure, and demonstrate, that research is conducted in an acceptable and ethical way'. With ethical considerations in mind, this study respects respondents' privacy in accordance with Victoria University's requirements. Anonymity and confidentiality were preserved in all sample groups.

This research practised ethical standards, as suggested by McGivern (2003):

- This study encouraged voluntary participation of respondents. No student was forced to participate in the research.

- The researcher made sure that all respondents were protected and not exposed to any harm, which includes physical, mental or legal harm.
- The researcher obtained consent from all participants and ensured that respondents were informed prior to the survey.
- All information provided is treated as strictly anonymous and confidential.
- This study practised transparency and informed participants that data collected was only used for academic purposes. This included no hiding, lying or any deceiving act to make them take part in the research.

3.2 Summary

Chapter 3 began by comprehensively outlined the research process the study had undergone. The six systematic steps involved were 1) literature review; 2) research design; 3) research procedures; 4) data collection; 5) data preparation and lastly, 6) data analysis process.

Quantitative approach was used in this study as the main objective of this study is to investigate an empirical phenomenon through a conceptual framework established from the integration of these existing theories and models. In this study, subjects were drawn from a large population, namely the international students who are currently studying in a private HEI in Malaysia and inferences about this population are then made. Both mail and web questionnaire surveys were adopted in this study for it is inexpensive and efficient for large sample administration. Questionnaires developed were formatted, proof read and pilot tested prior to official distribution.

Once data had been collected, the next important step was to prepare the data for analysis. The process began with coding and editing the questionnaire responses into SPSS. The subsequent step was data screening which involved an evaluation of missing data, assessment of data normality, identification of outliers and assessment of multicollinearity. This step was to ensure no error data that could potentially result in incorrect interpretation of the data, and yield biased results for the study.

Once data was properly screened, data analysis process followed subsequently. This study adopted a four-step SEM approach: 1) EFA analysis to reduce the large number of variables

and group them into a more manageable set of factors; 2) CFA analysis to ensure the reliability and validity of the measuring instruments prior to conducting the structural model analysis; 3) One-factor congeneric models for each construct were specified and tested before combining them into multi-factor models; 4) The final step involved constructing a structural model. Hypotheses of the study were tested after the identification of structural paths.

SEM requirements and procedures were presented next. The recommended sample size for SEM procedures was justified followed by outlining the five basic SEM steps as well as all the model fit indices used in this study. This study adopted the set of fit statistics recommended by Kline (2015). It consisted of a model test statistic and three approximate fit indexes. The fit statistics used are the chi-square with its degrees of freedom and *p* value, CMIN/df, CFI, RMSEA and SRMR. The reliability and validity assessment were then discussed. Cronbach alpha was used in reliability test to ensure the precision of a sample. The soundness or the plausibility of the measurement scale was tested through construct validity, an overlapping test of convergent and discriminant validity

The subsequent discussions covered the last part of data analysis process which consisted multi-group comparison. Mann-Whitney U Test and Kruskal-Wallis Test are non-parametric alternatives used to test for differences between two independent groups in this study. The Mann-Whitney U Test was performed to compare the male and female respondents, while the Kruskal-Wallis Test was applied to study the differences across HEI types. All data analyses in this study were performed using the SPSS version 24 and AMOS version 24. Finally, this chapter ended with a discussion of ethical considerations. The results of data analysis (descriptive, EFA and CFA analyses, validity and reliability tests, the structural equation modelling, as well as multi-group comparisons) were reported in Chapter 4.

CHAPTER 4 DATA ANALYSIS AND RESULTS

4.0 Introduction

Chapter 4 reports the research outcomes based on the survey data collected for this study. Data analysis was carried out in four stages: Section 4.1 presents Part A of the data analysis which comprises of descriptive statistics of respondents' personal characteristics. Part B (Section 4.2) of the data analysis consists of a four-step SEM approach: Step 1) EFA analysis was carried out to reduce the large number of variables into a more manageable set of factors; Step 2) One-factor congeneric models for each construct were specified and tested to ensure the reliability and validity of the measuring instruments; Step 3) One-factor congeneric models were combined into multi-factor models prior to conducting the structural model analysis; Step 4) The final step involved constructing a structural model. Hypotheses of the study were tested after the identification of structural paths. Next, Section 4.3 presents Part C of the data analysis. This section comprises of the results of cross-tabulation analysis which aimed at testing the relationship between respondents' satisfaction and their willingness to recommend. Section 4.4 reports Part D of the data analysis that consists of multi-group comparisons. The Mann-Whitney U Test was used to compare the male and female respondents, while the Kruskal-Wallis Test was applied to study the differences across HEI types. Both the Mann-Whitney U Test and Kruskal-Wallis Test are non-parametric alternatives used to test for differences between two or more independent groups. All data analyses in this study were performed using the SPSS version 24 and AMOS version 24. Table 4.1 outlines the sequence of data analyses that were conducted and the test results of each analysis are reported accordingly in this chapter.

Table 4.1 Steps of the data analysis process

Data Analysis Process	Purposes	Statistical Techniques
4.1 Part A – Descriptive analysis Descriptive analysis	Demographic profile	Frequency distribution

<p>4.2 Part B – Four-step modelling process</p> <p>4.2.1 Step 1 – Exploratory factor analysis</p> <p>4.2.2 Step 2 – CFA of one-factor congeneric model</p> <p>4.2.3 Step 3 – CFA of measurement model</p> <p>4.2.4 Step 4 – Structural equation model</p>	<p>Preliminary step to CFA</p> <ul style="list-style-type: none"> • One-factor congeneric model analysis • Multi-factor (measurement) model <ul style="list-style-type: none"> - Construct validity - Multicollinearity - Model fit • Structural model • Hypotheses testing 	<p>Principal axis factoring analysis</p> <ul style="list-style-type: none"> • SEM • SEM <ul style="list-style-type: none"> - Parameter estimates, factor loadings, AVE, MSV, SMC - fit indices • SEM
<p>4.3 Part C – Cross-tabulation analysis</p> <ul style="list-style-type: none"> • Cross-tabulation analysis 	<ul style="list-style-type: none"> • Satisfaction and willingness to recommend 	<ul style="list-style-type: none"> • Cross-tabulation analysis
<p>4.4 Part D – Multi-group analysis</p> <p>4.4.1 Multi-group analysis across gender</p> <p>4.4.2 Multi-group analysis across HEI type</p>	<p>Multi-group comparison</p>	<ul style="list-style-type: none"> • Non parametric test Mann Whitney U Test • Non parametric test Kruskal-Wallis Test

4.1 Part A: Descriptive Analyses

The following descriptive analyses outline the respondents' personal characteristics, country of origin and the type of HEI they have enrolled in for their study at the time of the survey. The population of interest for this study was defined as full-time international undergraduate and postgraduate students currently enrolled with a private HEI in Malaysia. The final sample size in this study is 435 respondents. The participants were selected through a random cluster sampling from 29 private HEIs in Klang Valley Malaysia. Table 4.2 presents the demographic

profile of the respondents. The background variables included gender, age, ethnicity, level and year of study, source of financial support for overseas education and household annual income.

4.1.1 Personal Characteristics

Table 4.2 Demographic profile of respondents

Characteristics	Categories	Frequency	Relative Frequency
Gender	Male	262	60.2
	Female	173	39.8
	TOTAL	435	100.0
Age	Below 18	14	3.2
	18–21	233	53.6
	22–25	151	34.7
	26–29	23	5.3
	Above 30	14	3.2
	TOTAL	435	100.0
Ethnicity	Asia	196	45.1
	Middle East	46	10.1
	Africa	41	9.4
	Others	152	35.4
	TOTAL	435	100.0
Level of study	Postgraduate	22	5.1
	Bachelor	375	86.2
	Diploma	38	8.7
	Others	0	0
	TOTAL	435	100.0
Year of study	First year	209	48.1
	Second year	135	31.0
	Third year	74	17.0
	Fourth year	17	3.9
	TOTAL	435	100.0

Financial support			
for overseas			
education	Parents	378	86.9
	Personal	24	5.5
	Company sponsored	4	0.9
	Scholarship	25	5.8
	Others	4	0.9
	TOTAL	435	100.0
Household income	Below \$25,000	196	45.1
	\$25,000–\$50,000	105	24.1
	\$50,001–\$75,000	69	15.9
	\$75,001– \$100,000	28	6.4
	Above \$100,000	37	8.5
	TOTAL	435	100.0

Of 435 respondents in this study, 262 (60.2%) were male and 173 (39.8%) were female. In terms of age group, a little over half of the respondents (53.6%) were between 18 and 21 years old and 34.7% in a relatively older age group between 22 and 25 years old. In other words, 88.3% of the respondents who participated in this study were young adults. A majority of the international students (86.2%) were pursuing a bachelor degree; 8.1% were studying in diploma programs and only 5.7% were engaged in study at a postgraduate level. Meanwhile the majority of the respondents were in their junior year of study (47% in first year and 31% in second year). In terms of financial support for their overseas education, a majority of the international students' overseas education was funded by their parents (86.9%). A relatively small proportion of respondents (5.7%) were on scholarship, while a similarly small proportion (5.5%) of the interviewed students relied on their personal savings. The results also showed that only a minority of respondents were funded by other sources, which include their employers or their spouse. In this study, 45.1% of the respondents were from a household annually earning less than US\$25,000 and 24.1% with a household income between US\$25,000 and US\$50,000. These statistics seem to suggest that the majority of the international students were from a lower to middle household income category.

4.1.2 Country Of Origin (COR)

As for country of origin (COR), respondents were from 59 different countries, with the top 10 countries listed as below (see Table 4.3). The top 10 countries of origin were Bangladesh, Indonesia, Pakistan, Nigeria, Sri Lanka, China, Yemen, Saudi Arabia, Sudan, Egypt and India.

Table 4.3 Top 10 country of origin

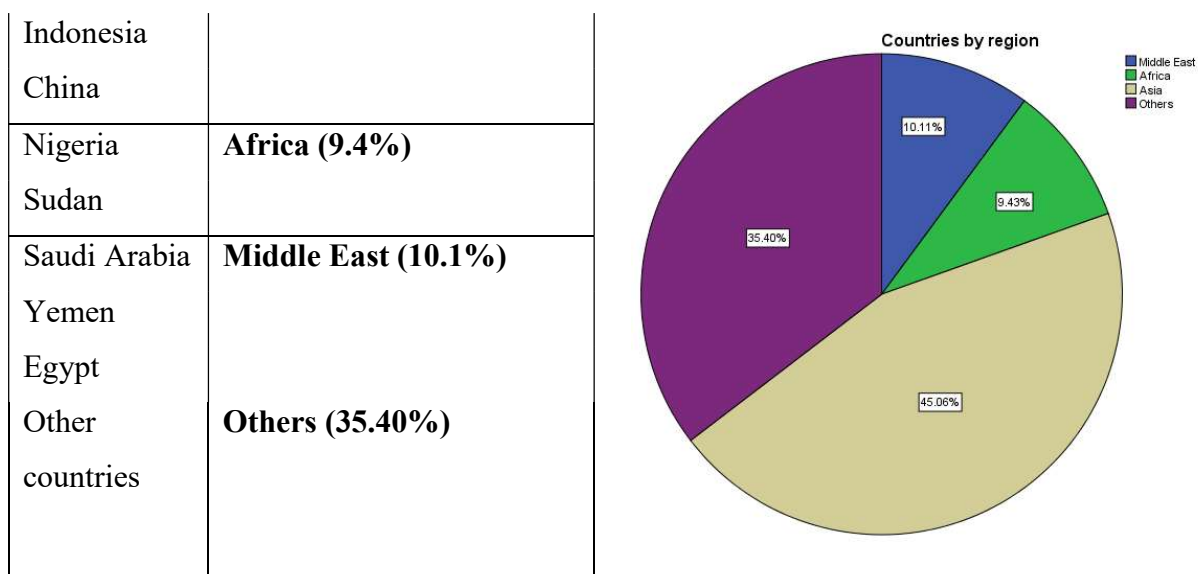
Top 10 Country	Country	Frequency	Relative Frequency (%)
1	Bangladesh	61	14.0
2	Indonesia	45	10.3
3	Pakistan	34	7.8
4	Nigeria	27	6.2
5	Sri Lanka	25	5.7
6	China	20	4.5
7	Yemen	19	4.4
8	Saudi Arabia	16	3.7
9	Sudan	14	3.2
10	Egypt	11	2.6
10	India	11	2.6
	Other countries	152	35.0
TOTAL		435	100.0

4.1.2.1 Country Of Origin by Region

The Top 10 countries could be further categorised into 3 regions: Asia, Africa and Middle East, as presented in Table 4.4.

Table 4.4 Summary of country of origin by region

Country Of Origin	Country Of Origin By Region	
Bangladesh	Asia (45.1%)	
Pakistan		
Sri Lanka		
India		



It can be seen that 45.1% of the respondents were from the Asia region, 10.1% from the Middle East region, 9.4% from the Africa region and the remaining 35.4% respondents from other regions of the world. Within the Asia region, South Asia (Bangladesh, Pakistan, Sri Lanka and India) was the biggest contributor of international students to Malaysia.

4.1.3 HEI Types

A total of 29 private HEIs that are located in the area of the Klang Valley Malaysia participated in this study. Among the participating institutions there were 11 private universities, 8 university colleges, 3 foreign university branch campuses, and 7 private colleges (see Table 4.5).

Table 4.5 Distribution of HEI types

HEI Types	Number of Institutions	Relative Frequency (%)
Private University	11	37.9
University College	8	27.7
Foreign University Branch Campus	3	10.3
Private College	7	24.1
TOTAL	29	100.0

Table 4.6 summarises the types of HEIs where the international students were approached. Private universities had the highest number of respondents interviewed, with private colleges recording the lowest. Out of 435 respondents, 209 respondents that participated were studying at private universities, 65 were at university colleges, 97 were at foreign university branch campuses and 64 were at private colleges. There were more international students from private universities compared to other HEI types.

Table 4.6 Respondents' distribution according to HEI types

Characteristics	Categories	Number of Respondents	Relative Frequency (%)
HEI Types	Private University	209	48.1
	University College	65	14.9
	Foreign University Branch		
	Campus	97	22.3
	Private College	64	14.7
	TOTAL	435	100.0

4.1.3.1 HEI Types and Country of Origin by Region

Table 4.7 displays the country of origin by region of international students studying at different types of HEIs in Malaysia.

Table 4.7 HEI types and country of origin by region

HEI Types* Countries by Region						
		Country of Origin by Region of Respondents				Total
		Middle East	Africa	Asia	Others	
HEI types	Private university	5	27	97	80	209
	University college	20	0	32	13	65
	Foreign university branch campus	0	14	49	34	97

	Private college	19	0	18	27	64
Total		44	41	196	154	435

Private universities (209), university colleges (65) and foreign university (97) branch campuses appear to host the highest number of international students from the Asia region. For private colleges, there were an equal number of international students originating from the Middle East (19) and Asia (18) regions.

4.1.4 Choosing a Private HEI in Malaysia

Findings suggested that international students' decision for selecting a private institution in Malaysia involved other parties (see Table 4.8).

Table 4.8 Choices made to study in private HEIs in Malaysia

	Decision to study abroad (%)	Decision to choose Malaysia (%)	Decision to choose current HEI (%)
Respondent	47.7	41.6	55.2
Parents	20.5	28.5	19.1
Joint	31.3	29.4	23.9
Others	0.5	0.5	1.8
TOTAL	100.0	100.0	100.0

A total of 47.7% respondents indicated that it was their own choice to study abroad, 31.3% of the respondents said it was a joint family decision and the remaining 20.5% quoted it was the parents' expectation for them to obtain a foreign degree. A total of 41.6% of the participants said it was their choice to study in Malaysia, while for the rest it was either their parents' decision or the result of a mutual family decision (28.5% versus 29.4%). In the case of HEI choice, more than half (55.2%) of the participants selected the institution themselves. Respondents who had their parents pick the institution for them totalled 19.7%, while 23.9% made their choice together with their family.

Table 4.9 Malaysia and current HEI as first choice

	Malaysia as first choice?	Current HEI as first choice?

	Frequency	Relative frequency (%)	Frequency	Relative frequency (%)
Yes	118	27.1	276	63.4
No	317	72.9	159	36.6
TOTAL	435	100.0	435	100.0

The descriptive statistics revealed that only 27.1% of respondents chose Malaysia as their first choice of study destination (see Table 4.9), whilst 72.9% of the respondents indicated Malaysia was not their first choice. These students revealed that they had also considered and compared other alternative countries before finally choosing Malaysia. The alternative countries were largely Australia, United Kingdom, USA, and Singapore. On the other hand, 63.4% participants indicated that their current HEI was their first choice, with only 36.6% who reported otherwise.

Table 4.10 Information obtained prior to choice and decision-making regarding higher education at Malaysia's private HEIs

	Information About Malaysia (%)	Information About Current HEI (%)	Information About Course/Program (%)
Uninformed	6.4	6.4	7.3
Moderately Informed	13.3	15.4	14.5
Well Informed	80.3	78.2	78.2
TOTAL	100.0	100.0	100.0

The majority of the respondents (80.3%) indicated they had obtained adequate information about Malaysia prior to making their choice and 3.3% of respondents were moderately informed while only a minority of 6.4% of participants admitted to being uninformed (see Table 4.10). Similarly 78.2% of international students indicated that they were well informed about the institution, as well as the program prior to their choice with only a minority of them being the exception (14.5% reported to be moderately informed and 7.3% were uninformed).

4.1.5 Information Source and Third Party Influence

International students were asked to indicate the importance of seven information sources in helping them to obtain information and ultimately make the decision to study in a private HEI in Malaysia. Table 4.11 revealed their responses towards the importance of these information sources in influencing their choices and decisions.

Table 4.11 Importance of information source for affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

Information Source	Relative Frequency (%)			
	Not Important	Neutral	Important	Not Applicable
Parents	4.1	7.6	85.5	2.8
Relatives	12.2	18.2	62.8	6.9
Friends	12.4	21.6	59.1	6.9
Institution Representatives	10.3	25.3	58.6	5.7
Education Agent	15.6	17.5	59.8	7.1
Online Search	6.4	13.6	80.0	—

The top two information sources that participants rated as important were parents and online searches. A total of 85.5% respondents in the study rated parents as an important source in providing them with the relevant information. Eighty per cent revealed that internet searches are important for obtaining information about study destinations, institutions, as well as courses and programs. The remaining international students' decisions were made based on recommendations from others, which may include the influence of relatives, friends, institutions' representatives and education agents. Discussions on third party influence in affecting international students' choice and decision-making will be elaborated upon in Section 5.2.3 of Chapter 5.

4.2 Part B: Four-step SEM Modelling

As discussed in Section 3.1.6.2 of Chapter 3, this study adopted a four-step modelling approach. The first step began with an exploratory factor analysis (EFA) using the principal axis factoring (PAF) method to explore the underlying structure of the data and identify relationships between measured variables before applying confirmatory factor analysis (CFA).

The subsequent step was to confirm the constructs through a two-step SEM approach that involved one-factor congeneric model analyses followed by multi-factor model analyses. The purpose of this two-step approach was to ensure reliability and validity of the measuring instruments prior to conducting a structural model analysis. The final step of the four-step SEM modelling involved assessment of the structural model and hypotheses testing. The following sections discussed the process of each modelling stage in detail.

4.2.1 Step 1: Exploratory Factor Analysis

Exploratory factor analysis (EFA) was the preliminary step to explore the factorability of the 125 items affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs. EFA intended to examine whether items of a construct share a single underlying factor prior to confirming the unidimensionality of those constructs in confirmatory factor analysis (CFA). Principal axis factoring (PAF) with direct-oblimin rotation method was the chosen method and the analysis was performed using the SPSS. Two separate PAF analyses were carried out to identify the underlying push-pull factors that influence the decision-making of international students, as well as the attributes that contribute to international students' satisfaction towards their overseas study experience. The results of the EFA analyses were included in Appendix C.

A total of 22 possible constructs were extracted for this study. Of the 22, 15 constructs (consisting of 76 items) were push-pull factors and the remaining 8 constructs (comprised of 49 items) related to satisfaction. All factors had eigenvalues greater than 1, accounting for 60% (push-pull factors affecting students' choice and decision-making) and 64.5% (satisfaction attributes) of the total variance explained. The Kaiser-Meyer-Olkin (KMO) measure of sampling accuracy was 0.908 for push full factors used, and 0.938 for satisfaction attributes respectively, far higher than the cut-off point of 0.6 as recommended by Pallant (2011) (see Section 3.1.6.2.4 of Chapter 3), thus indicating that the sample size was adequate. In addition, the Bartlett test of sphericity ($p = 0.000$, $p < .05$) for both EFA analyses further accentuated sampling adequacy. During EFA analyses, fifteen unsubstantial items (8 push-pull items and 7 satisfaction items) were suppressed. All remaining items (105 items) were loaded onto the expected factors, which aligned with how they were originally designed in the questionnaire. The communalities for all items were all above 0.30, supporting that each item shared some common variance with other items. Through EFA the large number of variables was reduced,

with similar variables grouped into a more manageable set of factors (Wheeler et al., 2004; Zikmund, 2009).

Subsequently internal consistency of the factors was tested using Cronbach's alpha (α) (Schumacker & Lomax, 2004; Kline, 2015). Cronbach's alpha of all constructs was above 0.70, satisfying the minimum threshold as recommended by Kline (2015) and thus indicating a good subscale reliability of all items (see Appendix C2). The items in each construct were examined and an appropriate name was given to each factor. For this study the interpretation of the factor-loading matrix was straightforward. Table 4.12 displayed the names of the factors extracted from EFA. Matching variable names in shorter format were created for SEM analysis purposes.

Table 4.12 Factors extracted from exploratory factor analysis

Factor	Factors Extracted from EFA	Variable Names in SEM
Push pull factors		
1	Home Country Limited Accessibility	Home_Limit
2	Home Country Economic & Politic Stagnation	Home_Instability
3	Career & Personal Development	P_Development
4	Personal Perception	P_Perception
5	Host Country Political Stability & Safety	Host_Stability
6	Host Country Image	Host_Image
7	Host Country Migration System	Host_Migration
8	Host Country Visa Processing	Host_Visa
9	Host Country Social & Cultural Diversity	Host_Culture
10	Host Country Attitude Towards Foreigners	Host_Attitude
11	Institution Image & Reputation	Hei_Image
12	Institution Program & Course	Hei_Program
13	Institution Ease of Entry	Hei_Entry
14	Institution Location	Hei_Location
15	Institution Facilities & Infrastructure	Hei_Facility
Satisfaction factors		
16	Satisfaction Host Migration & Visa	S_HostVisa
17	Satisfaction Host Country Image	S_HostImage
18	Satisfaction Social Experience	S_SOCIALEXP

19	Satisfaction HEI Reputation & Recognition	S_HeiReputation
20	Satisfaction HEI Supportive Learning Environment	S_HeiSupport
21	Satisfaction HEI Location & Safety	S_HeiLocation
22	Overall Satisfaction	OVERALL_SATIS

4.2.2 Step 2: One-Factor Congeneric Model Analysis

Once EFA had identified the possible constructs for the study, the next step was to confirm these factors in the confirmatory factor analysis (CFA). This section began with performing one-factor congeneric model analyses to ensure the unidimensionality of each construct followed by multi-factor analyses as reported in Section 4.2.3. The one-factor congeneric model or a unidimensional model is the simplest form of measurement model that represents the regression weights of the set of observed indicator variables on a single latent variable (Holmes-Smith et al., 2006). According to Hair et al. (2010), an individual observed variable should only be represented by one latent variable. A one-factor congeneric model can demonstrate the best fit of the model when observed variables associated with the construct are valid. The following sections discussed the one-factor congeneric model analyses for push-pull factors, as well as satisfaction constructs and their underlying observed indicators. This was performed using the maximum likelihood method in AMOS. For this analysis, the variance of the latent variable was set to 1, which allowed the path from the latent variable to its items to be freely estimated.

4.2.2.1 One-factor congeneric model home country limited accessibility (Home_Limit)

This section presents a unidimensional model for home country limited accessibility (*Home_Limit*). The initial model contained six observed variables. Examination of the one-factor congeneric model for this construct revealed a poor fit despite all items having high factor loadings (0.71–0.84). The rule of thumb for factor loading as recommended by Hair et al. (2010) is 0.50. Further inspection of modification indices indicated the measurement errors of items A1_6, A1_7, and A1_8 were responsible for the model misspecification. These variables appeared to be highly correlated with other items in the model. For instance, the contents of item (A1_16) '*Limited choice of institutions in my home country*' and item (A1_7) '*Limited choice of program/course in my home country*' obviously overlapped. As discussed in Chapter 3 under data screening (Section 3.1.5.2), multicollinearity occurs when a variable can be explained by other variables in the analysis (Hair et al., 2010). Byrne (2000); Tabachnick and Fidell (2006); and Kline (2015), pointed out that multicollinearity implies redundant

information and suggests that such items should be eliminated. The squared multiple correlation (SMC) of these items was assessed before removing them. Squared multiple correlation (SMC) or the item reliability is the measured variable's variance explained by a latent variable (Kline, 2015). Robinson et al. (1991) suggested the rule of thumb for SMC of an item should exceed 0.50. For this reason, items A1_6, A1_7 and A1_8 were dropped from the model. Three items (A1_5, A1_4, and A1_3) were retained for the final model.

With three items remaining, the imposition of constraints on particular parameters was required (Byrne 2000) to identify the model. The critical ratio difference (CRDIFF) method was used to determine which parameters needed to be constrained. This method generates a list of ratios for pair-wise parameter estimates. The residual CRDIFF generated for this model indicated that items A1_5 and A1_3 should be constrained equal. The estimated value for these two items was similar in magnitude at 0.418, with both being non-significant at ± 1.96 (Byrne, 2000). The model was re-analysed and revealed a good model fit. Mardia's coefficient for this construct was still high at 7.435 (greater than 5). Thus Bollen-Stine bootstrapping had been activated to correct the standard error and fit statistic bias. The bootstrap p value for this construct was 0.697 (greater than 0.05), which indicated there was insufficient evidence to reject the hypothesised model. The model fit indices were as displayed: $X^2 (1, N = 435) = 0.174$, $p = 0.676$, $X^2 / df = 0.174$, CFI = 1.000, TLI = 1.003, RMSEA = 0.000, SRMR = 0.002. For the construct home country limited accessibility (Home_Limit), each item loaded highly above 0.80 and was statistically significant (see Figure 4.1).

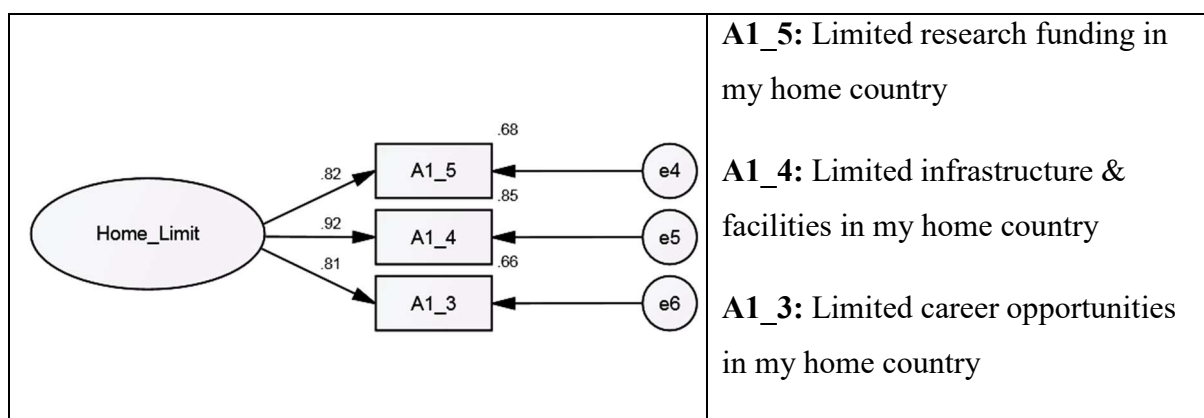


Figure 4.1 One-factor congruence model of home country limited accessibility

4.2.2.2 One-factor congeneric model of personal development (P_Development)

The initial assessment of the one-factor congeneric model for personal development (*P_Development*) revealed a poor fit. The model initially comprised eight variables with factor loadings that ranged from 0.67 to 0.83. All items were statistically significant with acceptable factor loadings above 0.50, as suggested by Hair et al. (2010). Modification indices demonstrated that items A1_15, A1_16, A1_21 and A1_22 were the cause for model misspecification. The measurement error covariances of these items suggested some items were redundant with overlapped content. For instance, the measurement error covariances of item (A1_22) ‘*Study abroad allows me to be more independent*’ was highly correlated with item (A1_21) ‘*Study abroad allows me to travel and have fun*’. Items A1_15, A1_17, A1_20, A1_21 and A1_22 were all dropped due to weak SMC. A low SMC (or the item reliability) suggests the presence of an item(s) that does not sufficiently explain a construct and hence should be eliminated (Robinson et al., 1991). The removal of five problematic items yielded the final model with three items. The CRDIFF method was applied, and as a result, items A1_19 and A1_18 were constrained to be equal as their pair-wise parameter estimates values were below ± 1.96 (Byrne, 2000). Mardia’s coefficient for this model was 41.452, which was greater than five. Bollen-Stine bootstrapping was activated and the bootstrap p value was 0.750. Bootstrap p value greater than 0.05 indicated there was insufficient evidence to reject the hypothesised model and thus it suggested a good model fit. The final model of three items (A1_19, A1_18 and A1_16) then achieved a good fit with all items loaded significantly above the minimum factor loading of 0.50, as recommended by Hair et al. (2010). All three items had high factor loadings between 0.74 and 0.87. The model fit statistics for this model were: $X^2(1, N = 435) = 0.107$, $p = 0.743$, $X^2/df = 0.107$, CFI = 1.000, TLI = 1.004, RMSEA = 0.000, SRMR = 0.002 (see Figure 4.2).

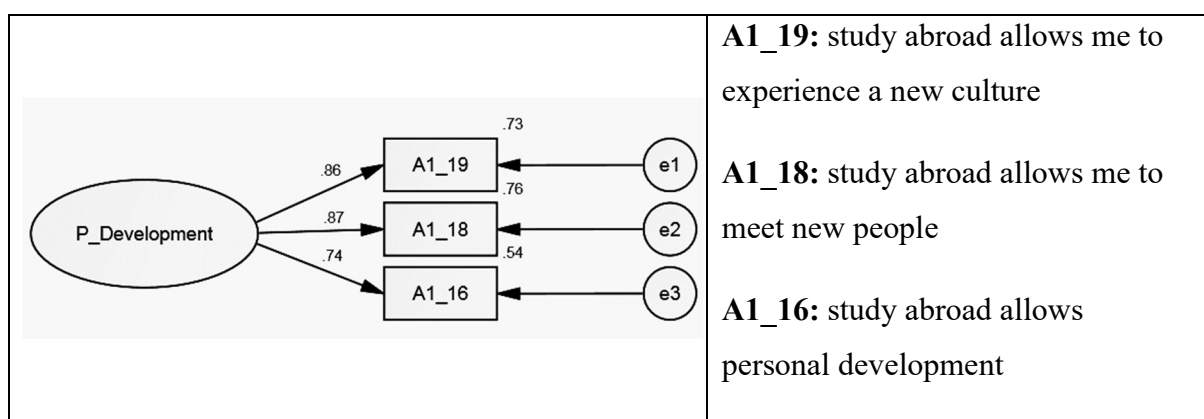


Figure 4.2 One-factor congeneric model of personal development (P_Development)

4.2.2.3 One-factor congeneric model of personal perception (P_Perception)

The construct of personal perception (*P_Perception*) originally consisted of five variables, and the initial assessment for this model appeared poor fit. All items had acceptable factor loadings (0.58–0.81) that were above the 0.50 threshold as suggested by Hair et al. (2010). However, after examining the modification indices, measurement error covariance between e1 and e4 was high at 127.987 with a parameter change estimate of 0.274. Item A1_11 (e1) ‘*Foreign qualifications have better quality*’ and A1_10 (e4) ‘*Foreign qualifications are preferred by employers*’ were the cause for multicollinearity, as these items were also measuring other items. Item A1_10 was therefore dropped. Furthermore, item A1_14 was also eliminated from the model due to a weak item reliability (SMC value 0.35, $SMC < 0.50$) to further improve model fit. With three items remaining, the final model was assessed applying the CRDIFF test. The CRDIFF test suggested items A1_11 and A1_13 could be constrained equally in order for the model to be identified. Bollen-Stine bootstrapping was activated, as Mardia’s coefficient of the model was high at 17.629 (greater than 5). The bootstrap p value of 0.635 (greater than 0.05) showed that the hypothesised model should be retained. The result of the final model showed a good model fit: $X^2(1, N = 435) = 0.295, p = 0.587, X^2/df = 0.295, CFI = 1.000, TLI = 1.004, RMSEA = 0.000, SRMR = 0.004$ (see Figure 4.3). The three items that made up the final personal perception factor (*P_Perception*) were: A1_11, A1_12, and A1_13. All items loaded significantly with high factor loadings (0.76–0.84).

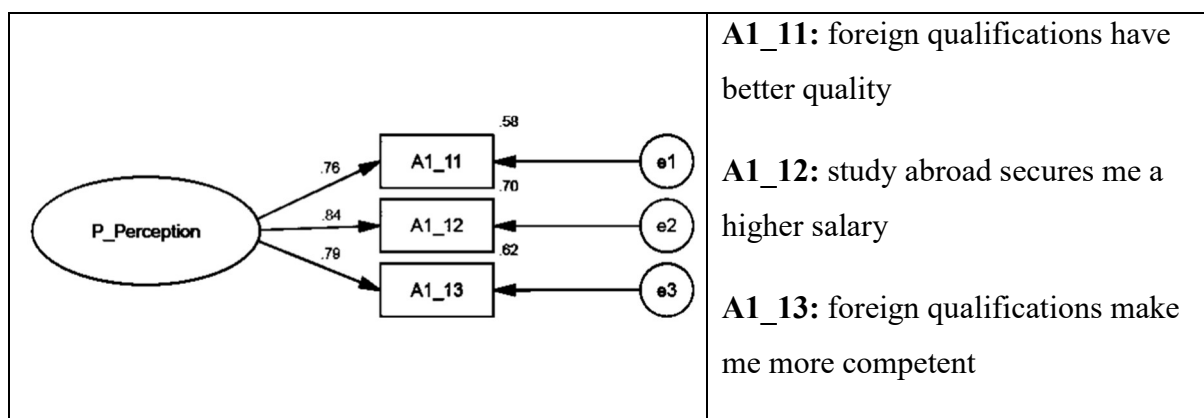


Figure 4.3 One-factor congeneric model of personal perception (P_Perception)

4.2.2.4 One-factor congeneric model of host country political stability and safety (Host_Stability)

The host country political stability and safety (*Host_Stability*) construct contained four variables and the initial assessment revealed the model had a poor fit. An inspection of items’

factor loadings, as well as item reliability (the SMC value), showed that item (B3_16) ‘*Malaysia has a stable currency exchange rate*’ and item (B3_11) ‘*Malaysia is a peaceful & harmonious country*’ were weak items. The rule of thumb is that factor loadings should be greater than 0.50 (Hair et al., 2010) and likewise SMC, as suggested by Robinson et al. (1991). Both items had low factor loadings and SMC below 0.40. B3_16 and B3_11 were hence eliminated to improve the model fit. With two items remaining, the one-factor congeneric model could not be specified as there were insufficient indicators in this construct. For a CFA model to be identified, there are some straightforward rules that apply: 1) A single factor has at least three indicators (three-indicator rule), or 2) Two or more factors where each factor has two or more indicators (two-indicator rule) (Kline, 2015). For this reason the institution program and course factor (*Hei_Programme*) were brought into the model to perform a two-factor model analysis. The model then achieved good fit but Mardia’s coefficient was still high at 29.748 (should be less than 5). Bollen-Stine bootstrapping was activated and the outcome showed that each item in the model remained statistically significant at 5% level of significance (BS $p = 0.277$; $p > 0.05$). There was thus insufficient evidence to reject the hypothesised model. The final items for host country political stability and safety construct were: B3_14 and B3_13, with both items loaded high at 0.73 and 0.92 respectively. The goodness-of-fit indices of the model were as follows: $X^2 (8, N = 435) = 16.442$, $p = 0.036$, $X^2 / df = 2.055$, CFI = 0.992, TLI = 0.984, RMSEA = 0.049, SRMR = 0.027 (see Figure 4.4).

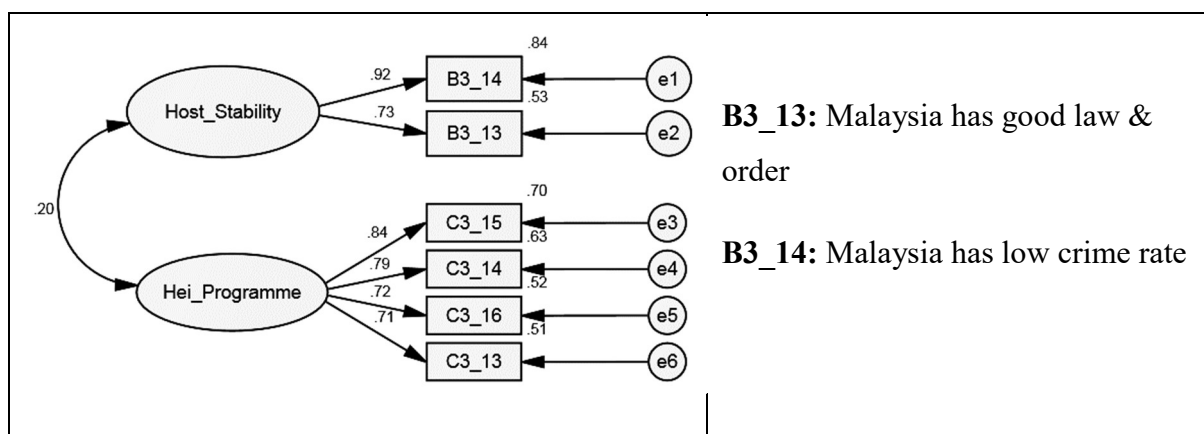


Figure 4.4 One-factor congeneric model of host country political stability and safety (Host_Stability)

4.2.2.5 One-factor congeneric model of host country image (Host_Image)

Host Country Image (*Host Image*) originally had four indicators with high factor loadings (0.70–0.80). According to Hair et al. (2010), factor loading should be at least 0.50. An

inspection of modification indices revealed that items B3_2 and B3_1 were the cause for model misspecification (high measurement errors covariance of 60.728, with parameter change estimates of 0.275). Item B3_2 ‘*Malaysia has high quality of HE system*’ and item B3_1 ‘*Malaysia is a popular study destination*’ were found to cause multicollinearity. Multicollinearity is an implication of information redundancy and such items can be eliminated as recommended by Byrne (2000); Tabachnick and Fidell (2006); and Kline (2015) (see Section 3.1.5.2.5 of Chapter 3). Item B3_1 was then removed from the model due to its low SMC. A minimum value of SMC should be at least 0.50 (Robinson et al., 1991). With three items remaining, model fit could not be obtained due to the lack of degree of freedom. The CRDIFF test result suggested the path of B3_3 and B3_4 be constrained equal. Figure 4.5 displayed the results of the final model and revealed a good model fit: $X^2(1, N = 435) = 0.086$, $p = 0.769$, $X^2/df = 0.086$, CFI = 1.000, TLI = 1.005, RMSEA = 0.000, SRMR = 0.002. Mardia’s coefficient for this construct was however still higher than five (18.420). Bollen-Stine bootstrapping was thus activated to correct the standard error and fit statistic bias. The bootstrap p value of 0.745 suggested a good model fit as bootstrap p value greater than 0.05 indicated there was insufficient evidence to reject the model. All remaining items loaded significantly in the construct of host country image, with factor loadings above 0.68 (see Figure 4.5).

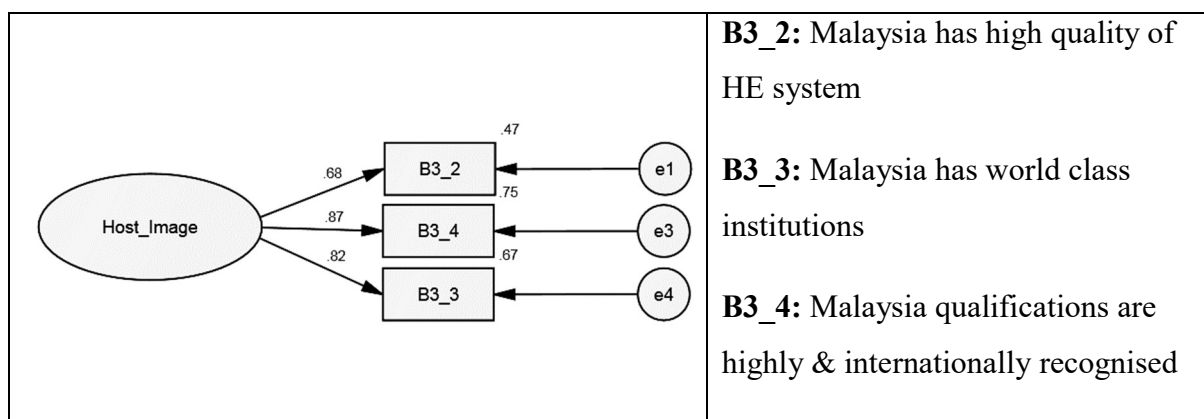


Figure 4.5 One-factor congruence model of host country image (Host_Image)

4.2.2.6 One-factor congruence model of host country migration system (Host_Migration)

The construct of the host country migration system (*Host_Migration*) consisted of only three indicators and a model could not be identified due to the lack of degree of freedom. To overcome this problem, the CRDIFF test was performed. The result of the CRDIFF test suggested that items B3_22 and B3_24 could be constrained equal, as their estimated values were significant at ± 1.96 (Byrne, 2000). The model was then re-assessed and the goodness-of-

fit indices showed that the data fitted the model well. Mardia's normalised estimate = 3.574, $X^2(1, N = 435) = 0.298$, $p = 0.585$, $X^2/df = 0.298$, CFI = 1.000, TLI = 1.005, RMSEA = 0.000, SRMR = 0.005. All items loaded relatively high from 0.65 to 0.92 (see Figure 4.6), achieving the minimum threshold of 0.50 for factor loading as recommended by Hair et al. (2010).

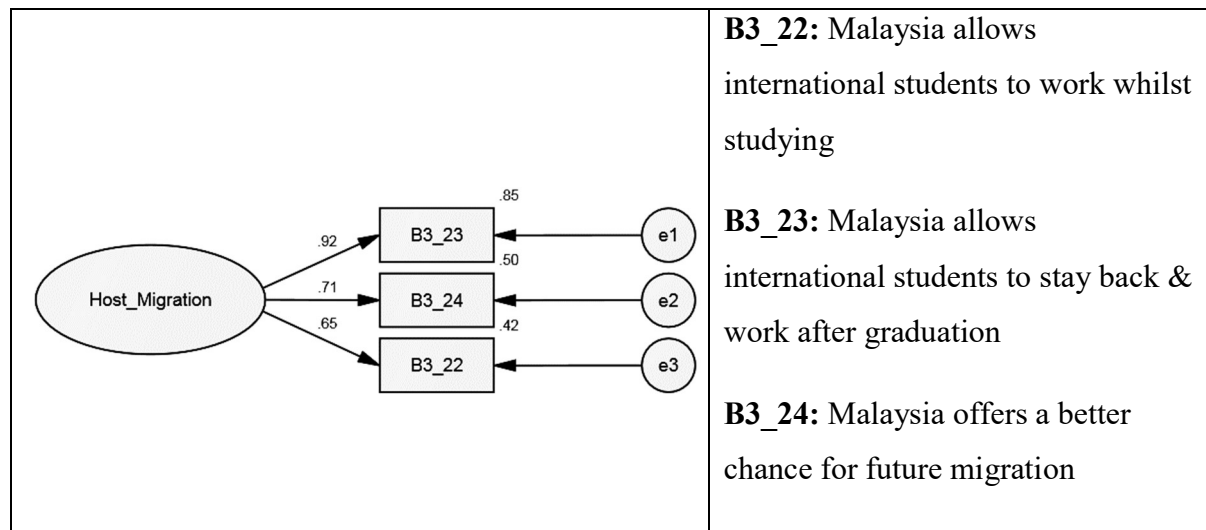


Figure 4.6 One-factor congeneric model of host country migration system (Host_Migration)

4.2.2.7 One-factor congeneric model of host country visa processing (Host_Visa)

The host country visa processing factor (*Host_Visa*) consisted of only two observed variables. The one-factor congeneric model could not be identified for this construct as it violated the three-indicator rule. In order to fulfil the two-indicator rule for successful model identification: Two or more factors where each factor has two or more indicators (Kline, 2015), institution program and course construct '*Hei_Program*' was brought into the model to perform a two-factor model analysis. The goodness-of-fit indices indicated satisfactory fit after the model was identified. Fit statistics for this model were: $X^2(8, N = 435) = 9.493$, $p = 0.302$, $X^2/df = 1.187$, CFI = 0.998, TLI = 0.997, RMSEA = 0.021, SRMR = 0.016. Despite an overall good model fit, Mardia's normalised estimate was still above five (27.497). To rectify the standard error and fit statistic bias, Bollen-Stine bootstrapping was applied. Bollen-Stine p value of 0.627 (greater than 0.05) suggested that the hypothesised model should be retained, as the estimated parameter estimates using the adjusted standard errors showed both items were still statistically significant at 5% level of significance. Item B3_20 and B3_21 loaded significantly in this construct, 0.69 and 0.84 respectively (see Figure 4.7). These items met the minimum threshold of 0.50 for factor loading as recommended by Hair et al. (2010).

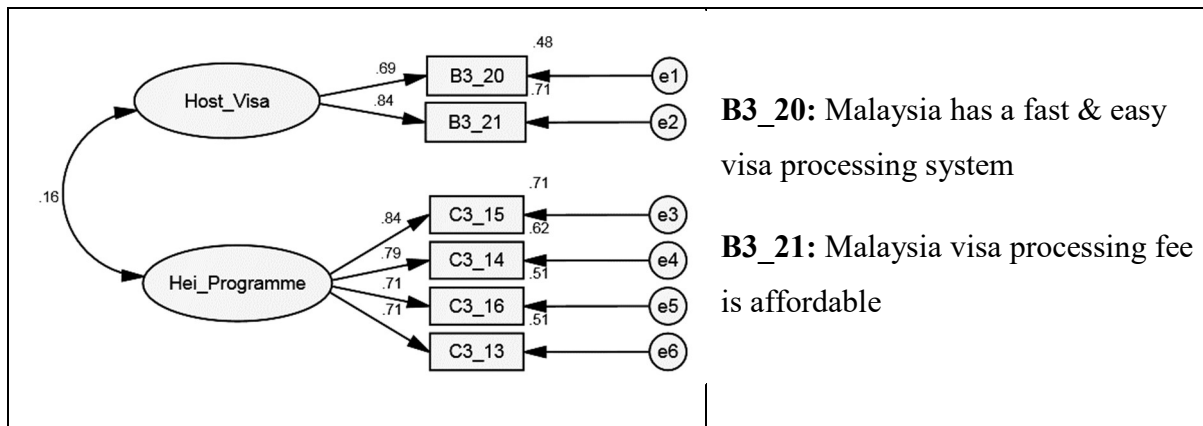


Figure 4.7 One-factor congeneric model of host country visa processing (*Host_Visa*)

4.2.2.8 One-factor congeneric model of host country social & cultural diversity (*Host_Culture*)

The one-factor congeneric model of host country social and cultural diversity (*Host_Culture*) originally contained four variables and the initial assessment revealed a bad fit. An inspection of items' regression weight, as well as item reliability, revealed that item B3_9 was a weak item (factor loading below 0.50 and SMC below 0.30). The rule of thumb for factor loading should be 0.50 or above (Hair et al., 2010) and likewise for SMC as recommended by Robinson et al. (1991). Item B3_9 was dropped from the model for model fit improvement. On the other hand, item B3_10 was retained in the model as it met the minimum requirement for factor loading recommended by Hair et al. (2010) (see Figure 4.8). With three items remaining, the CRDIFF test was performed on this construct to identify which two parameters needed to be constrained equal in order to identify the model. As a result, items B3_7 and B3_8 were constrained equal as their pair-wise parameters estimates values were below ± 1.96 (Byrne, 2000). The model was re-examined and the goodness-of-fit indices showed: $X^2 (1, N = 435) = 1.813, p = 0.178, X^2 / df = 1.813, CFI = 0.998, TLI = 0.994, RMSEA = 0.043, SRMR = 0.012$. Bollen-Stine bootstrapping was performed as Mardia's normalised estimate was high at 29.573 (should be below 5). Bootstrap p value of 0.265 (greater than 0.05) indicated that there was insufficient evidence to reject the model and all remaining items were loaded significantly for this construct.

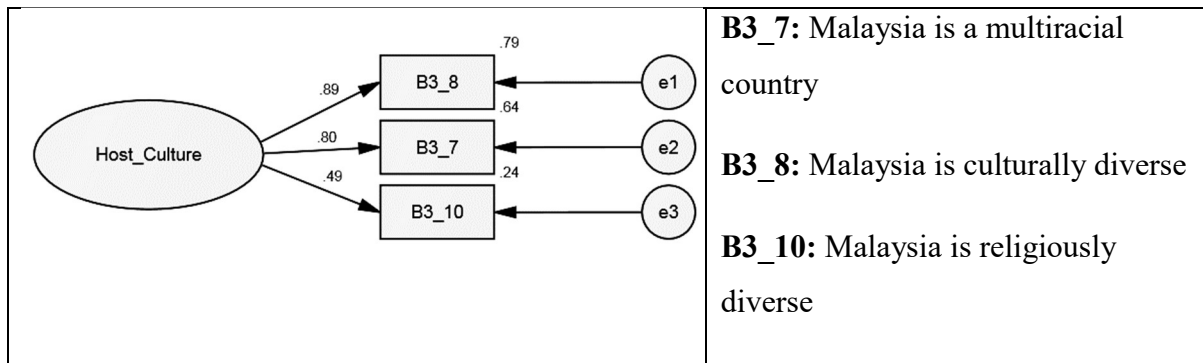


Figure 4.8 One-factor congeneric model of host country social and cultural diversity (Host_Culture)

4.2.2.9 One-factor congeneric model of host country attitude towards foreigners (Host_Attitude)

Similar to the host country visa processing factor, the construct of host country attitude towards foreigners (*Host_Attitude*) could not be identified with only two variables. The model violated the three-indicator rule required for one-factor congeneric model identification. The same solution was applied here by taking in '*Hei_Program*' factor to run a two-factor model analysis. The CFA model then met the two-indicator rule with two or more factors where each factor has two or more indicators (Kline, 2015). Finally, the model was identified with goodness-of-fit indices that showed the data fitted the model well except Mardia's coefficient was still high above five (28.786). The model fit statistics showed: $X^2(8, N = 435) = 6.961, p = 0.541$, $X^2/df = 0.870$, CFI = 1.000, TLI = 1.002, RMSEA = 0.000, SRMR = 0.013. Bollen-Stine bootstrapping was applied to rectify the standard error and fit statistic bias. Bollen-Stine p value of 0.701 (greater than 0.05) was evidence that the hypothesised model should not be rejected, as the estimated parameter estimates using adjusted standard errors showed both items were statistically significant at 5% level of significance. With high factor loadings of 0.77 and 0.84, both items in this construct met the minimum threshold of 0.50 for factor loading as recommended by Hair et al. (2010) (see Figure 4.9).

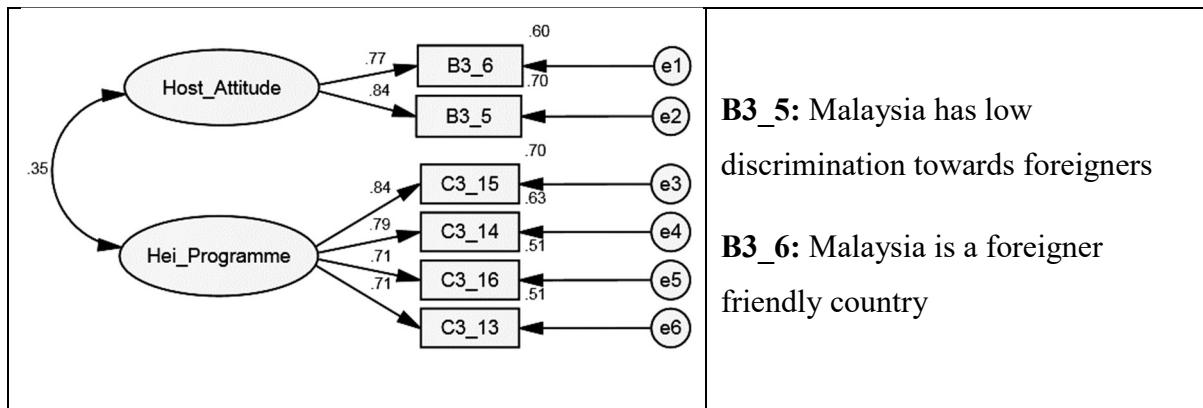


Figure 4.9 One-factor congeneric model of host country attitude towards foreigners (Host_Attitude)

4.2.2.10 One-factor congeneric model of institution image and reputation (Hei_Image)

The congeneric model of institution image and reputation (*HEI_Image*) construct contained five variables, with all items loaded above 0.60. Factor loading should be 0.50 or above (Hair et al., 2010). The process of model re-specification began by removing item (C3_3) '*its qualification is recognised in my home country*', as SMC (the item reliability) was below the recommended threshold of 0.50 (Robinson et al., 1991). An inspection of modification indices then revealed high measurement error covariance between item (C3_4) '*It is internationally recognised*' and item (C3_5) '*It has a long history of establishment as an education institution*'. These items caused model misspecification, and a solution to co-vary both items' error terms was introduced to improve the model fit. The model was resubmitted and results indicated a good fit of data to the model with fit statistics revealed: $X^2 (1, N = 435) = 0.399, p = 0.528$, $X^2 / df = 0.399$, CFI = 1.000, TLI = 1.003, RMSEA = 0.000, SRMR = 0.003. Mardia's coefficient was still high at 35.244 and Bollen-Stine bootstrapping was performed. All items (the estimated parameter estimates and adjusted standard errors) remained statistically significant at 5% level of significance. The bootstrap p value of 0.725 indicated that the hypothesised model should be retained, as there was insufficient evidence to reject the model. The remaining four items had high factor loadings (0.69–0.91) that achieved the minimum threshold of 0.50 for factor loading as recommended by Hair et al. (2010) (see Figure 4.10).

	<p>C3_1: It is a world-class institution</p> <p>C3_2: It is internationally recognised</p>
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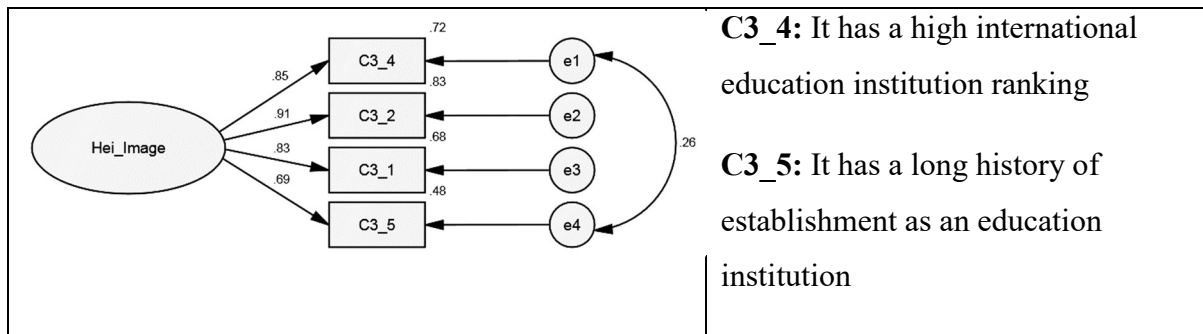
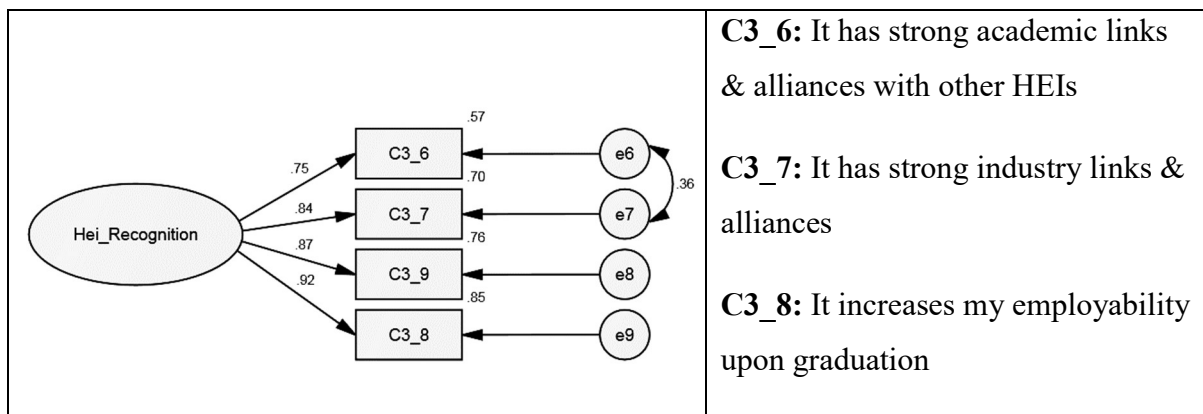


Figure 4.10 One-factor congeneric model of institution image and reputation (Hei_Image)

4.2.2.11 One-factor congeneric model of institution recognition and employability (Hei_Recognition)

The analysis of the congeneric model associated with institution recognition and employability (*Hei_Recognition*) showed that the data did not fit the hypothesised model despite all four items having high factor loadings (0.80–0.89) that were above 0.50, as recommended by Hair et al. (2010). An examination of modification indices revealed that item (C3_6) '*It has strong academic links & alliances with other HEI*' and item (C3_7) '*It has strong industry links & alliances*' caused the misspecification. As noted earlier, measurement error covariance could be an implication of content overlap. A decision was made to co-vary the error terms of items C3_6 and C3_7 ($e6 \leftrightarrow e7$), as the measurement error covariance was high at 26.464 with a parameter change of 0.114 (see Figure 4.12). The model then achieved good fit. Mardia's coefficient was however still high at 30.086 (greater than 5). Bollen-Stine bootstrapping was activated and the result indicated a lack of sufficient evidence to reject the model. The bootstrap p value was 0.924 (greater than 0.05) and suggested a good model fit with estimated parameters and adjusted standard errors of all items remaining statistically significant ($P < 0.05$). The goodness of fit of the final model was: $X^2 (1, N = 435) = 0.032, p = 0.858, X^2 / df = 0.032, CFI = 1.000, TLI = 1.005, RMSEA = 0.000, SRMR = 0.001$.



	C3_9: It has a high employment rate for its graduates
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Figure 4.11 One-factor congeneric model of institution recognition and employability (Hei_Reognition)

4.2.2.12 One-factor congeneric model of institution program and course (Hei_Program)

The construct institution program and course (*Hei_Program*) originally contained eight variables. The goodness-of-fit indices improved after eliminating four items (C3_10, C3_12, C3_17 and C3_18). This decision was made based on two considerations: firstly, inspection of modification indices suggested these items were the cause of model misspecification. Secondly, a further examination of the items' reliability revealed that these variables were weak in explaining the model. The SMC of these items was below the recommended value of 0.50 (Robinson et al., 1991). The removal of these four items resulted in the final model having appropriate goodness of fit: $X^2 (2, N = 435) = 4.730, p = 0.094, X^2 / df = 2.365, CFI = 0.996, TLI = 0.989, RMSEA = 0.056, SRMR = 0.014$ (see Figure 4.12). Mardia's coefficient was however still high at 32.174 (greater than 5). Similarly Bollen-Stine bootstrapping was also applied here to rectify the standard error and fit statistic bias. The bootstrap p value of 0.309 recommended that the hypothesised model should be retained, as there was not sufficient evidence to reject the model. All remaining variables were statistically significant at 5% level of significance and a factor loading ranging from 0.71 to 0.84 (see Figure 4.12) and fulfilled the recommended threshold of 0.50 for factor loading by Hair et al. (2010).

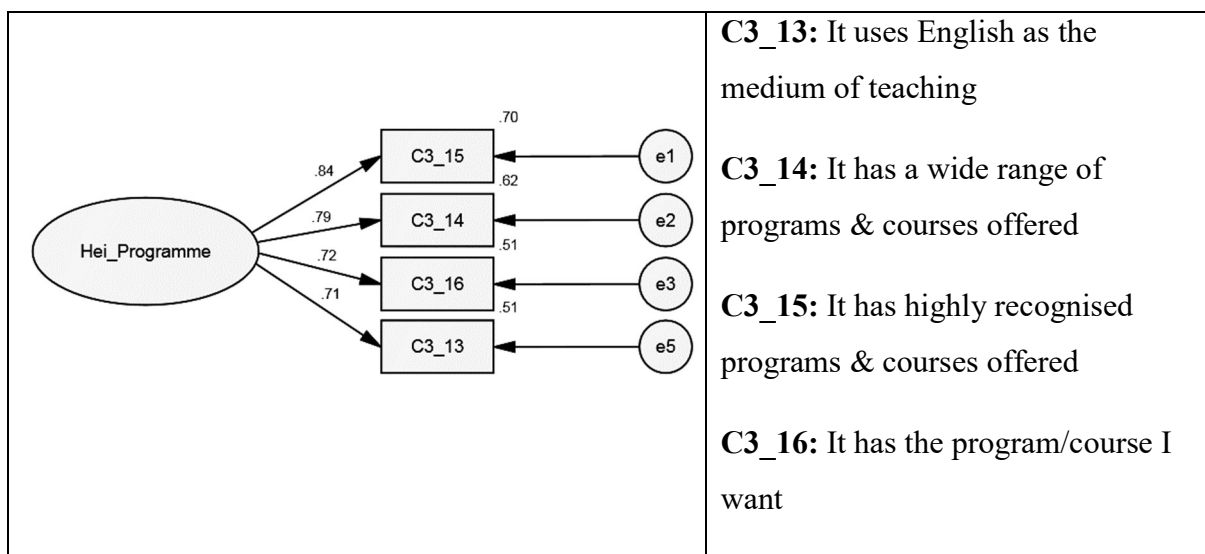


Figure 4.12 One-factor congeneric model of institution program and course (Hei_Program)

4.2.2.13 One-factor congeneric model of institution ease of entry (Hei_Entry)

This section discusses the congeneric model of institution ease of entry (*Hei_Entry*). The model had four variables to begin with and the model fit indices suggested the data fitted the model poorly. An inspection of the SMC of the items revealed that item C3_19 had low item reliability. This proved that item (C3_19) '*it has low entry requirement*' was not measuring the construct sufficiently and hence this weak item was removed from the model. With three items remaining, the CRDIFF test was performed. The path of item C3_20 and item C3_21 were constrained to be equal as the CRDIFF result showed their pairwise estimated values were less than ± 1.96 (Byrne, 2000). The model was then retested and showed a good data fit to the model: $X^2(1, N = 435) = 0.088, p = 0.767, X^2/df = 0.088, CFI = 1.000, TLI = 1.005, RMSEA = 0.000, SRMR = 0.029$. Figure 4.13 revealed that factor loadings of all items were above the recommended threshold of 0.50 by Hair et al. (2010). Despite the model having achieved overall good fit, Mardia's coefficient was still high at 14.517 (above 5). Bollen-Stine bootstrapping was activated as a solution. Bootstrap p value of 0.810 (greater than 0.05) indicated there was insufficient evidence to reject the model and suggested a good model fit for the hypothesised model.

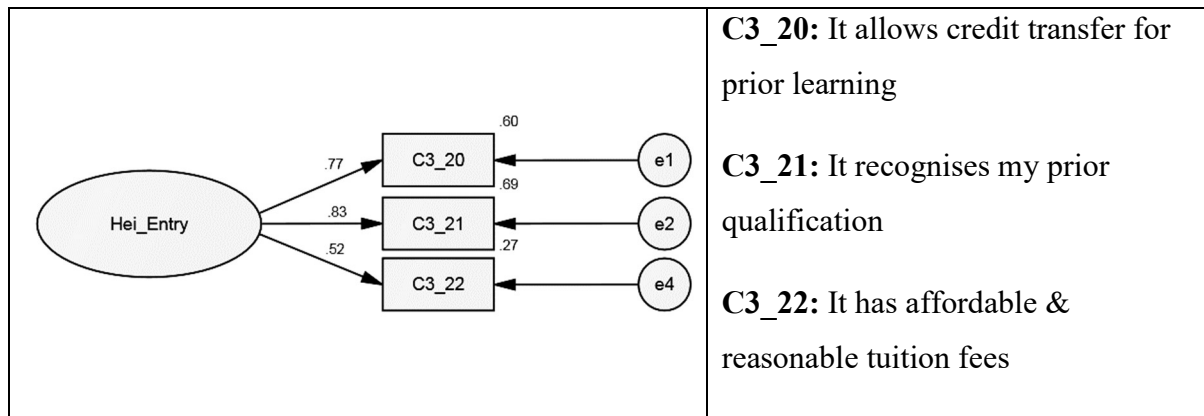


Figure 4.13 One-factor congeneric model of institution ease of entry (*Hei_Entry*)

4.2.2.14 One-factor congeneric model of institution location (*Hei_Location*)

The congeneric model of institution location (*Hei_Location*) also contained four variables with all items loaded highly above 0.70 (see Figure 4.14). An inspection of the modification indices revealed that items C3_24 and C3_27 were responsible for the model misspecification. The measurement error covariances between item C3_24 '*It is conveniently located*' and C3_27 '*It is located near to hospitals, shops, restaurants, transportation*' was high at 29.414 with the parameter change of estimates at 0.230. This was evidence of content overlapping between the

items. A further examination of the items' SMC revealed that item C3_24 had low item reliability. According to Robinson et al. (1991), a minimum SMC of 0.50 is essential for an item's reliability, or the item should be removed, and thus it led to the removal of item C3_24. The CRDIFF test was performed as there were only three items now remaining. The paths of C3_25 and C3_26 were constrained to equal based on the CRDIFF test. The model was finally identified. Mardia's coefficient was still high at this point (9.865) and Bollen-Stine bootstrapping was activated. Bootstrap p value of 0.946 (greater than 0.05) was an indication that there was not enough evidence to reject the hypothesised model. The final model with three indicators had achieved optimum fit: $X^2 (1, N = 435) = 0.003, p = 0.954, X^2 / df = 0.003, CFI = 1.000, TLI = 1.006, RMSEA = 0.000, SRMR = 0.000$.

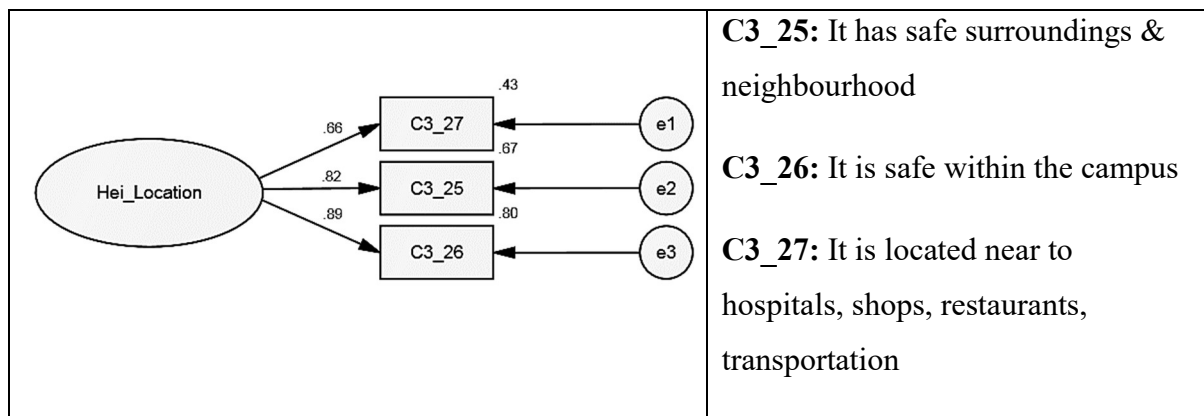


Figure 4.14 One-factor congeneric model of institution location (Hei_Location)

4.2.2.15 One-factor congeneric model of institution facilities and support (Hei_Facility)

With only three items, the congeneric model of institution facilities and support (*Hei_Facility*) could not be obtained due to the lack of degree of freedom. The CRDIFF analysis was performed and the test results suggested that the path of C3_28 and C3_20 needed to be constrained equal. The model was then identified with goodness-of-fit indices showing the data fitted the model well. The fit statistics were: $X^2 (1, N = 435) = 0.131, p = 0.717, X^2 / df = 0.131, CFI = 1.000, TLI = 1.004, RMSEA = 0.000, SRMR = 0.002$. Mardia's normalised estimate for this construct was also above five (high at 21.720) and Bollen-Stine bootstrapping was activated. The model was retained as bootstrap p value of 0.770 (greater than 0.05), suggesting there was insufficient evidence to reject the hypothesised model. The final model showed all items loaded significantly on this construct with factor loading of all items surpassing 0.80, above the recommended value of 0.50 by Hair et al. (2010) (see Figure 4.15).

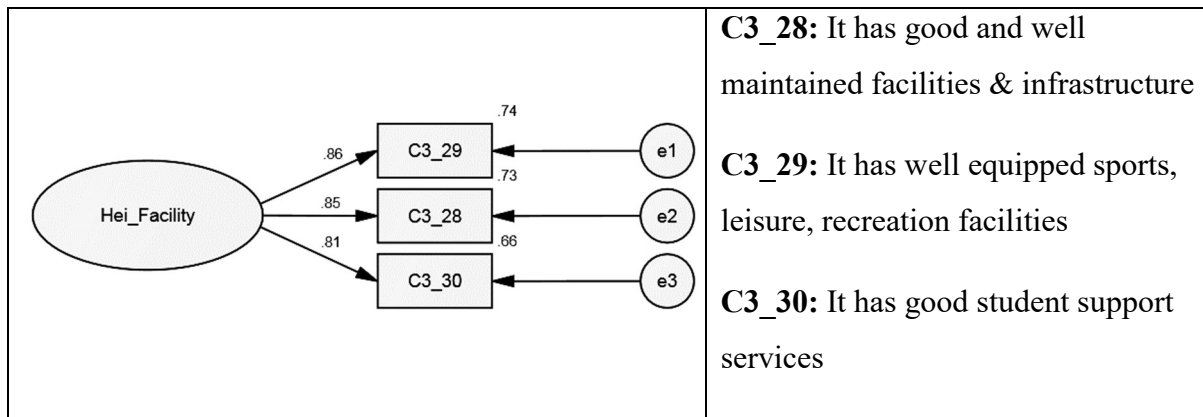


Figure 4.15 One-factor congeneric model of institution facilities and infrastructure (Hei_Facility)

4.2.2.16 One-factor congeneric model of decision-making (Dmaking)

With only three items, the congeneric model of decision-making (*Dmaking*) could not be identified initially as there was an insufficient degree of freedom. The CRDIFF test was applied and the results of CRDIFF showed that the path of D1_1new2 and D1_3new2 should be constrained as equal. The model was then successfully identified with goodness-of-fit indices that showed the data fitted the model well. The final model fit indices were: $X^2 (1, N = 435) = 0.761, p = 0.383, X^2 / df = 0.761, CFI = 1.000, TLI = 1.003, RMSEA = 0.000, SRMR = 0.011$. The final model showed all items loaded significantly on this construct with factor loading of all items surpassing the recommended threshold of 0.50 by Hair et al. (2010) (see Figure 4.16).

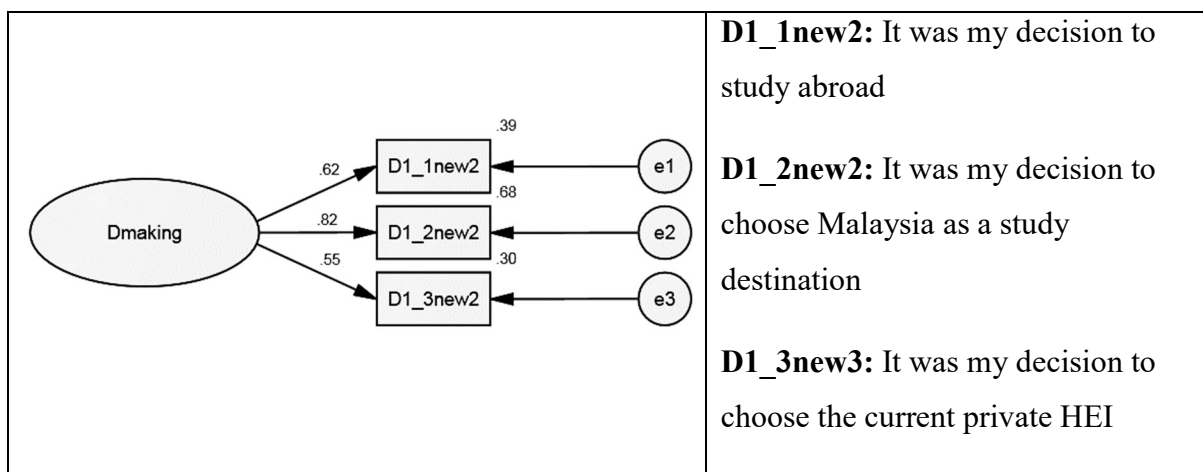


Figure 4.16 One-factor congeneric model of decision-making (Dmaking)

4.2.2.17 One-factor congeneric model of the level of awareness (Informed)

The congeneric model of the level of awareness of international students prior to decision-making (*Informed*) could not be identified due to the lack of degree of freedom, with only three

items in the model. The CRDIFF test was performed to generate a list of ratios for pair-wise parameter estimates and the test results indicated that items D2_1 and D2_3 should be constrained equal. The estimated value for these two items was similar in magnitude at 0.541, with both being non-significant at ± 1.96 (Byrne, 2000). The final model fit indices were: $X^2(1, N = 435) = 3.947, p = 0.047, X^2/df = 3.947, CFI = 0.994, TLI = 0.983, RMSEA = 0.082, SRMR = 0.015$. All items in this model produced high factor loadings from 0.67 to 0.97 (see Figure 4.17). Mardia's normalised estimate was high at 22.884 (greater than 5) and hence the Bollen-Stine bootstrapping was activated. The model was retained, as the bootstrap p value of 0.138 indicated there was insufficient evidence to reject the hypothesised model and suggested the model fitted the data well.

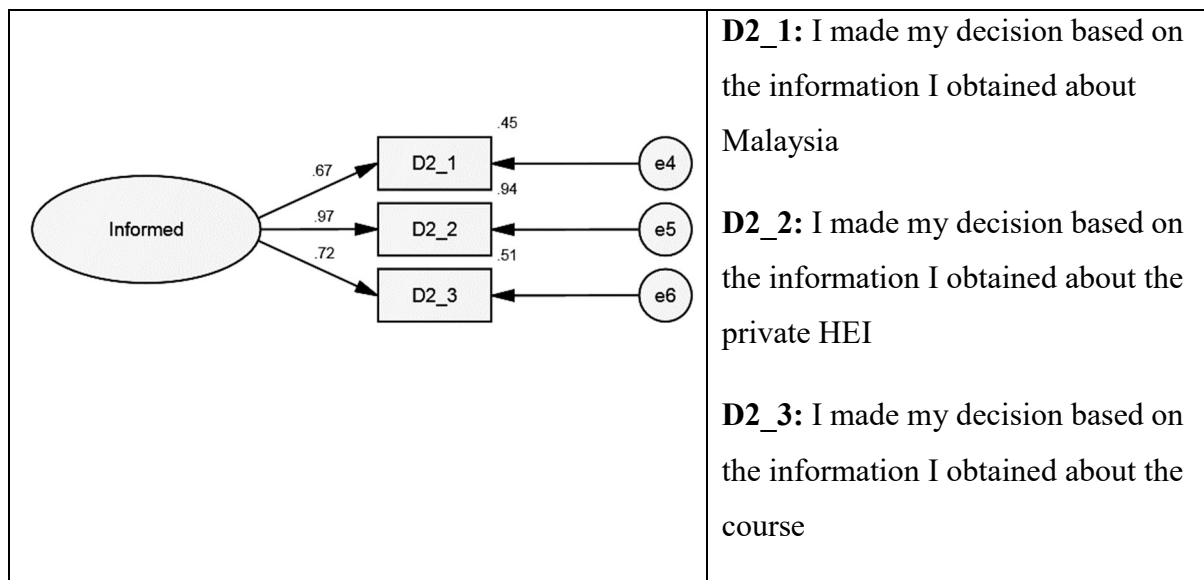


Figure 4.17 One-factor congruence model of level of awareness (Informed)

4.2.2.18 One-factor congruence model of satisfaction towards the host migration and visa system (S_HostVisa)

The congruence model of international students' satisfaction towards the host country visa and migration system ($S_{HOSTVISA}$) could not be identified with only two variables. The model had violated the three-indicator rule required for one-factor congruence model identification. An additional construct ($S_{HEIREPUTATION}$) was introduced to run a two-factor model analysis. The model was then identified, as it met the two-indicator rule with two or more factors where each factor has two or more indicators (Kline, 2015). The goodness-of-fit indices revealed the data fitted the model well. The fit statistics were: $X^2(4, N = 435) = 1.820, p = 0.769, X^2/df = 0.455, CFI = 1.000, TLI = 1.004, RMSEA = 0.000, SRMR = 0.004$. Mardia's

coefficient was however still high at 15.040 (above 5). Bollen-Stine bootstrapping was applied to rectify the standard errors and fit statistic bias. Bollen-Stine p value of 0.709 (greater than 0.05) was evidence that the hypothesised model should not be rejected as the estimated parameter estimates using the adjusted standard errors showed both items were statistically significant at 5% level of significance. Both items had high factor loadings that surpassed 0.80, which met the minimum threshold of 0.50 for factor loading as recommended by Hair et al. (2010) (see Figure 44.18).

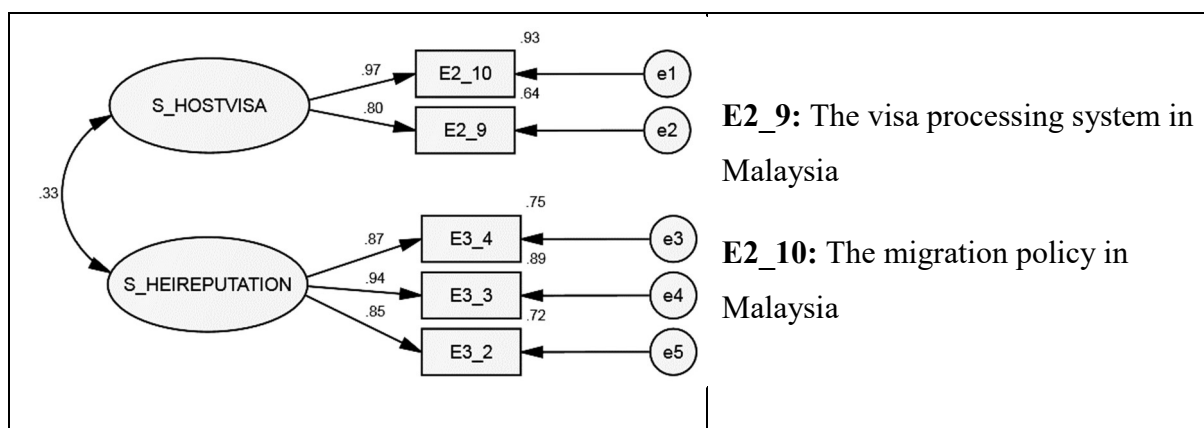


Figure 4.18 One-factor congruence model of satisfaction towards host migration and visa (S_HostVisa)

4.2.2.19 One-factor congruence model of satisfaction towards the host country image (S_HostImage)

This section presents the unidimensional model for international students' satisfaction towards the host country image ($S_{HostImage}$). The initial model had six variables. Examination of the one-factor congruence model for this construct revealed a poor fit. Three items (E2_6, E2_7, E2_8) were dropped from the model after an inspection of SMC and modification indices. A low SMC (item reliability) of these items was an indication that these items did not sufficiently represent the construct (Kline, 2015). High modification indices confirmed that these items indeed were responsible for model misspecification. The removal of three weak items left the final model with only three items. Imposition of constraints on any two parameters was required (Byrne, 2000) to identify the model and thus the CRDIFF test was applied. The residual CRDIFF generated for this model indicated that items E2_1 and E2_2 should be constrained equal. The estimated pair-wise values for these two items were similar in magnitude at -0.830 , with both being non-significant at ± 1.96 (Byrne, 2000). The model was then re-analysed and revealed as a good model fit. Mardia's coefficient for this construct was

however still above five (9.231). Thus Bollen-Stine bootstrapping was activated to correct the standard errors and fit statistic bias. The bootstrap p value for this construct was 0.337 (greater than 0.05) that indicated there was insufficient evidence to reject the hypothesised model. The goodness-of-fit indices for the final model were: $X^2 (1, N = 435) = 0.690$, $p = 0.406$, $X^2 / df = 0.690$, CFI = 1.000, TLI = 1.002, RMSEA = 0.000, SRMR = 0.006. Each item in this final model was statistically significant with acceptable factor loadings above 0.60, which was above the minimum threshold of 0.50 for factor loading as recommended by Hair et al. (2010) (see Figure 4.19).

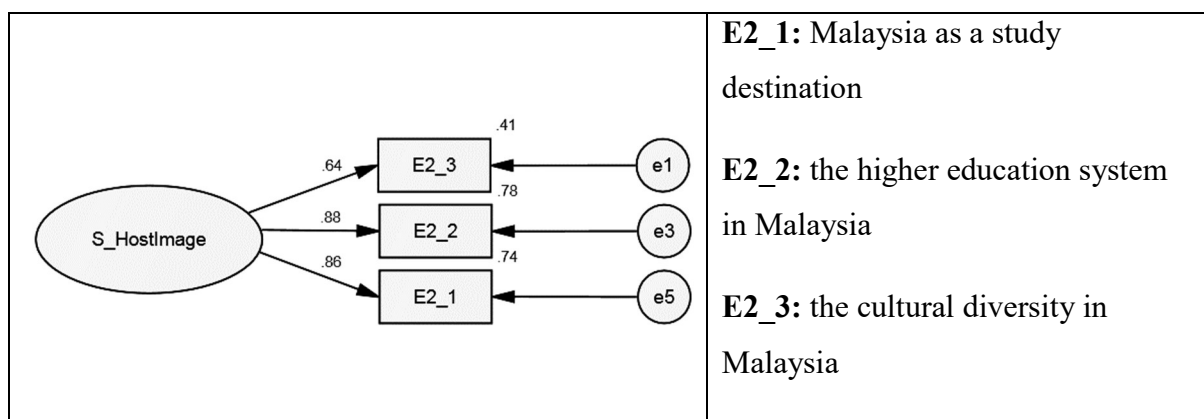


Figure 4.19 One-factor congruic model of satisfaction towards host country image (S_HostImage)

4.2.2.20 One-factor congruic model of satisfaction of social experience (S_SOCIALEXP)

The construct of international students' satisfaction towards their social experience ($S_SOCIALEXP$) consisted of four variables. The initial assessment of the one-factor congruic model indicated data fitted poorly for the model despite all items having high factor loadings (0.69–0.92) (see Figure 4.20). According to Hair et al. (2010), factor loading should be at least 0.50 or above. An examination of modification indices revealed that the measurement error covariance between $e3 \leftrightarrow e4$ was high at 104.733 with a parameter change estimate of 0.435. Item E2_4 ($e3$) '*the attitude towards foreigners in Malaysia*' and item E2_5 ($e4$) '*the social experience in Malaysia*' were found to be responsible for the model to be misspecified. The error terms of these two items were co-varied. The model was re-analysed and the goodness of fit of the model was: $X^2 (1, N = 435) = 1.252$, $p = 0.263$, $X^2 / df = 1.252$, CFI = 1.000, TLI = 0.999, RMSEA = 0.024, SRMR = 0.003. Despite the overall good fit, Mardia's coefficient of the model was high at 24.321 (above 5). Bollen-Stine bootstrapping

was activated and bootstrap p value of 0.285 (greater than 0.05) suggested that the hypothesised model should be retained.

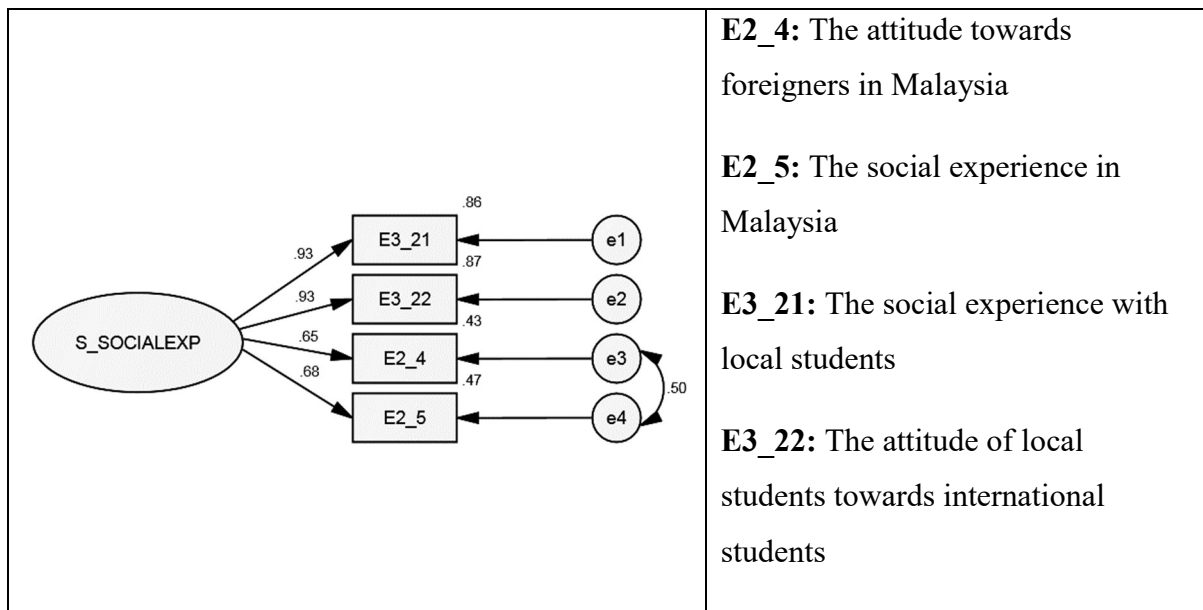


Figure 4.20 One-factor congruence model of satisfaction towards social experience (S_SOCIALEXP)

4.2.2.21 One-factor congruence model of international students' satisfaction towards HEI recognition and reputation (S_HEIREPUTATION)

This section presents the unidimensional model for international students' satisfaction towards their institution recognition and reputation ($S_{HEIREPUTATION}$). The initial model consisted of six observed variables and the model revealed a poor fit despite all items having high factor loadings from 0.82 to 0.89 (see Figure 4.21). An inspection of the modification indices revealed that items E3_5 and E3_6 were causing the model misspecification. High measurement error covariance of 124.50 with a parameter change estimate of 0.212 indicated multicollinearity, indicating these items were also measuring other items (see Section 3.1.5.2.5 of Chapter 3). Item (E3_5) '*the industry link & alliances*' and item (E3_6) '*the academic link & alliances*' were eliminated to improve the model fit. With three items remaining, the model fit could not be obtained due to a lack of degree of freedom. The CRDIFF test was performed and the results from the CRDIFF suggested the paths of E3_3 and E3_4 to be constrained equal. The model was re-assessed and the results of the final model revealed a good model fit: $X^2(1, N = 435) = 2.108, p = 0.147, X^2/df = 2.108, CFI = 0.999, TLI = 0.996, RMSEA = 0.051, SRMR = 0.055$. Bollen-Stine bootstrapping was activated, as Mardia's coefficient for this construct was greater than five (15.417). The standard errors and fit statistic bias were rectified and bootstrap p value

of 0.172 (greater than 0.05) indicated there was insufficient evidence to reject the model. All remaining items loaded significantly in the final model with high factor loadings above 0.85, which met the threshold of 0.50 for factor loading as recommended by Hair et al. (2010).

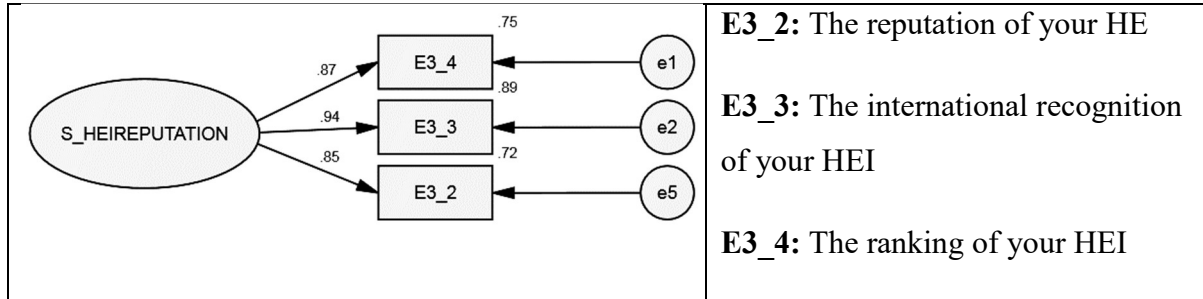


Figure 4.21 One-factor congeneric model of satisfaction towards HEI recognition and reputation (S_HEIREPUTATION)

4.2.2.22 One-factor congeneric model of international students' satisfaction towards HEI supportive learning environment (S_HeiSupport)

The removal of three items (E3_10, E3_11 and E3_15) was carried out to improve the model fit for the congeneric model of international students' satisfaction towards their private HEI learning and support (*S_HeiSupport*). The deletion of these items was made based on the following rationales. The initial assessment of this six-item model revealed a poor fit. Modification indices indicated that items E3_10, E3_11 and E3_15 were responsible for the model misspecification. For instance, a high measurement error covariance of 77.334 with a parameter change of 0.199 between item E3_11 (e5) '*The service quality of administrative related matters*' and item E3_10 (e6) '*the teaching quality of the academic staff*'. Similarly high modification indices of 31.889 with a parameter change of 0.100 between item E3_12 (e2) '*The efforts in taking care of international students*' and item E3_11 (e5) '*The service quality of administrative related matters*'. High measurement error covariances among these items were an indication of content redundancy. A further assessment of the items' SMC revealed low items' reliability, making the elimination of these items justifiable. All three items had low item reliability. With three items remaining, the CRDIFF test was performed on this construct to identify which two parameters needed to be constrained equal in order to identify the model. The paths of items E3_12 and E3_14 were constrained to be equal as their pair-wise parameters estimates values were significant below ± 1.96 (Byrne, 2000). The model was re-examined and the goodness-of-fit indices showed: $X^2 (1, N = 435) = 0.218, p = 0.640$, $X^2 / df = 0.218$, CFI = 1.000, TLI = 1.002, RMSEA = 0.000, SRMR = 0.001 (see Figure 5.22).

Bollen-Stine bootstrapping was performed as Mardia's normalised estimate was high at 11.618 (should be below 5). A bootstrap p value of 0.653 (greater than 0.05) indicated that there was insufficient evidence to reject the model and all remaining items loaded significantly for this construct.

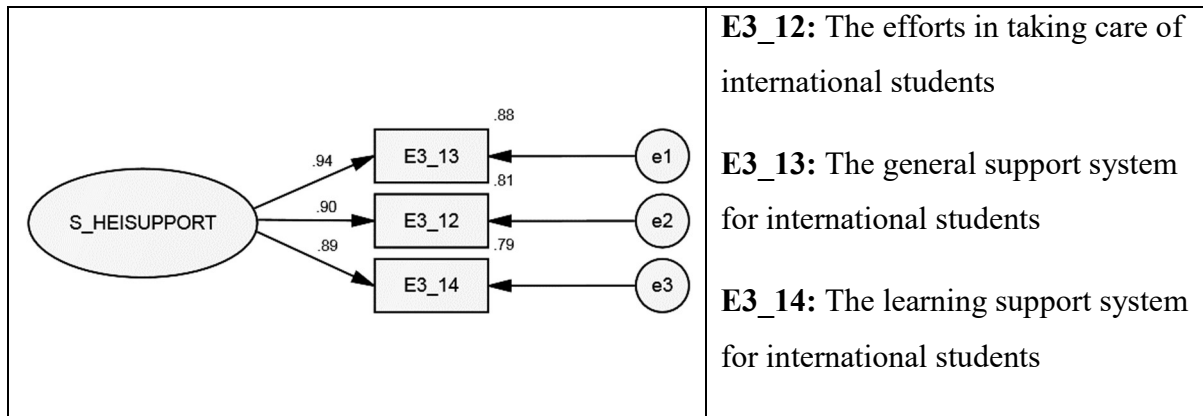


Figure 4.22 One-factor congeneric model of satisfaction towards HEI learning and support (S_HeiSupport)

4.2.2.23 One-factor congeneric model of international students' satisfaction towards HEI location and safety (S_HeiLocation)

The congeneric model of international students' satisfaction towards their HEI location and safety (*S_HeiLocation*) contained four variables with all items loaded high above 0.70 (see Figure 4.23). An inspection of modification indices revealed that items C3_24 and C3_27 were causing the poor fit. The high measurement error covariances between (e1) 'the access to public transportation' and (e4) 'the access to campus facilities' were found to be responsible for the model misspecification. A cross examination of the items' SMC confirmed that item C3_24 was a weak indicator. Problematic item C3_24 was thus removed from the model. The CRDIFF test was performed, as there was not enough of a degree of freedom to assess the model fit with the three items remaining. The paths of E3_18 and E3_19 were constrained to be equal based on the CRDIFF test results and the model was then re-examined. Mardia's coefficient was high at 19.911 (above 5) despite other fit indices appearing adequate for the model. Bollen-Stine bootstrapping was activated to rectify the standard errors and fit statistics bias. A bootstrap p value of 0.517 (greater than 0.05) was an indication that there was not enough evidence to reject the hypothesised model. The final model with three indicators achieved a good fit: $X^2(1, N = 435) = 0.633$, $p = 0.426$, $X^2/df = 0.633$, CFI = 1.000, TLI = 1.002, RMSEA = 0.000, SRMR = 0.006.

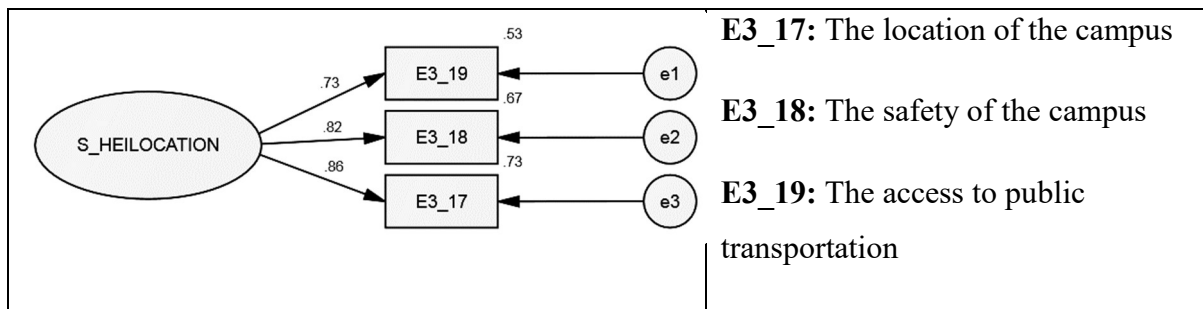


Figure 4.23 One-factor congruic model of satisfaction towards HEI location and safety (S_HeiLocation)

4.2.2.24 One-factor congruic model of international students' overall satisfaction (OVERALL_SATIS)

The six-item congruic model of international students' overall satisfaction (*OVERALL_SATIS*) appeared to have a poor fit. An initial assessment to modification indices revealed that items E1_1 and E1_5 were causing the model misspecification. There were high measurement error covariances of 38.603 with a parameter change of 0.122 between (e4) '*I'm very satisfied with my HEI*' and (e6) '*I'm very satisfied with Malaysia as a study destination*'. Both items recorded a low SMC and low item reliability indicated these items were not explaining the variances of the latent variable sufficiently (Kline, 2015). These items were removed, leaving the final model with four items. The model was re-analysed and revealed an adequate fit despite Mardia's coefficient being still above five (15.347). Bollen-Stine bootstrapping was thus activated to correct the standard errors and fit statistic bias. The bootstrap *p* value for this construct was 0.341 (greater than 0.05). There was insufficient evidence to reject the hypothesised model. The goodness-of-fit indices for the final model appeared satisfactory: $X^2(2, N = 435) = 3.112, p = 0.211, X^2/df = 1.556, CFI = 0.999, TLI = 0.997, RMSEA = 0.036, SRMR = 0.008$. Each item in this final model was statistically significant with relatively high factor loadings (0.78–0.93) (see Figure 4.24).

	<p>E1_2: The overall experience with Malaysia as a study destination exceeded my expectation</p> <p>E1_3: I'm very satisfied with my HEI</p>
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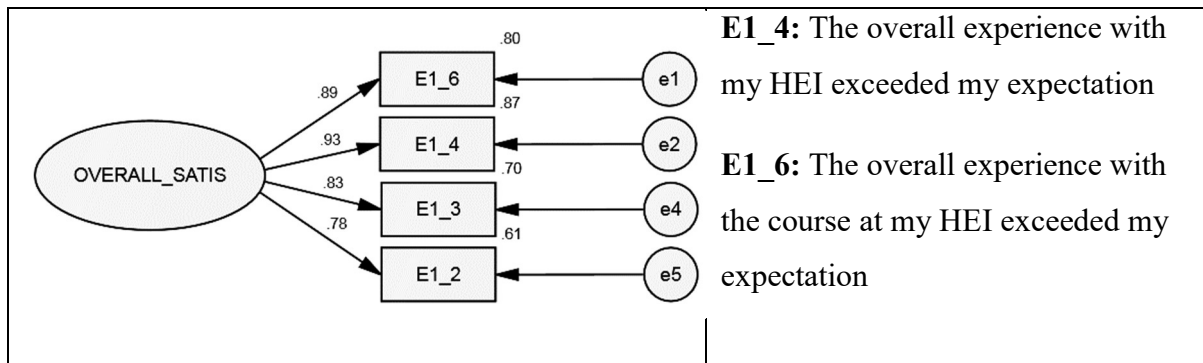


Figure 4.24 One-factor congeneric model of overall satisfaction (OVERALL_SATIS)

4.2.2.25 Summary of One-Factor Congeneric Model Analysis

Through the congeneric modelling process, home country economic and political stagnation (*Home_instability*) was dropped, as the model could not be identified. Institution image and reputation (*Home_Image*) was split into two factors: institution image and reputation (*Hei_Image*) and institution recognition and employability (*Hei_Recognition*). A summary of all one-factor congeneric models was displayed in Table 4.13.

Table 4.13 Summary of one-factor congeneric model analysis

Construct	Items deleted	Items remaining	Model fit	
Home_Limit	A1_7 A1_6 A1_8	A1_5 A1_4 A1_3	X ² /df = 0.174 RMSEA = 0.000 CFI = 1.000 Mardia's = 7.435	P = 0.676 SRMR = 0.002 TLI = 1.003 Bollen Stine = 0.679
P_Development	A1_22 A1_21 A1_17 A1_15	A1_19 A1_18 A1_16	X ² /df = 0.107 RMSEA = 0.000 CFI = 1.000 Mardia's = 41.452	P = 0.743 SRMR = 0.002 TLI = 1.004 Bollen Stine = 0.750
P_Perception	A1_10 A1_14	A1_11 A1_12 A1_13	X ² /df = 0.295 RMSEA = 0.000 CFI = 1.000 Mardia's = 17.629	P = 0.587 SRMR = 0.004 TLI = 1.004 Bollen Stine = 0.635
Host_Stability	B3_16 B3_11	B3_14 B3_13	X ² /df = 2.055 RMSEA = 0.049	P = 0.992 SRMR = 0.027

			CFI = 0.992 Mardia's = 29.748	TLI = 0.984 Bollen Stine = 0.178
Host_Image	B3_1	B3_2 B3_4 B3_3	X ² /df = 0.086 RMSEA = 0.000 CFI = 1.000 Mardia's = 18.420	P = 0.769 SRMR = 0.002 TLI = 1.000 Bollen Stine = 0.745
Host_Migration		B3_23 B3_24 B3_22	X ² /df = 0.298 RMSEA = 0.000 CFI = 1.000 Mardia's = 3.574	P = 0.585 SRMR = 0.005 TLI = 1.005
Host_Visa		B3_20 B3_21	X ² /df = 1.187 RMSEA = 0.021 CFI = 0.998 Mardia's = 27.497	P = 0.302 SRMR = 0.016 TLI = 0.997 Bollen Stine = 0.627
Host_Culture	B3_9	B3_8 B3_7 B3_10	X ² /df = 1.813 RMSEA = 0.043 CFI = 0.998 Mardia's = 29.573	P = 0.178 SRMR = 0.012 TLI = 0.994 Bollen Stine = 0.265
Host_Attitude		B3_6 B3_5	X ² /df = 0.870 RMSEA = 0.000 CFI = 1.000 Mardia's = 28.786	P = 0.541 SRMR = 0.013 TLI = 1.002 Bollen Stine = 0.701
Hei_Image	C3_3	C3_4 C3_2 C3_1 C3_5	X ² /df = 0.399 RMSEA = 0.000 CFI = 1.000 Mardia's = 35.244	P = 0.528 SRMR = 0.003 TLI = 1.003 Bollen Stine = 0.725
Hei_Recognition		C3_6 C3_7 C3_9 C3_8	X ² /df = 0.032 RMSEA = 0.000 CFI = 1.000 Mardia's = 30.086	P = 0.858 SRMR = 0.001 TLI = 1.005 Bollen Stine = 0.924
Hei_Program	C3_17 C3_18	C3_15 C3_14	X ² /df = 2.365 RMSEA = 0.056	P = 0.094 SRMR = 0.014

	C3_13 C3_10	C3_16 C3_13	CFI = 0.996 Mardia's = 32.174	TLI = 0.989 Bollen Stine = 0.309
Hei_Entry	C3_19	C3_20 C3_21 C3_22	X ² /df = 0.088 RMSEA = 0.000 CFI = 1.000 Mardia's = 14.517	P = 0.767 SRMR = 0.029 TLI = 1.005 Bollen Stine = 0.810
Hei_Location	C3_24	C3_27 C3_25 C3_26	X ² /df = 0.003 RMSEA = 0.000 CFI = 1.000 Mardia's = 9.865	P = 0.954 SRMR = 0.000 TLI = 1.006 Bollen Stine = 0.946
Hei_Facility		C3_28 C3_29 C3_30	X ² /df = 0.131 RMSEA = 0.000 CFI = 1.000 Mardia's = 21.720	P = 0.717 SRMR = 0.002 TLI = 1.004 Bollen Stine = 0.770
DMaking		D1_1New2 D1_2New2 D1_3New2	X ² /df = 0.761 RMSEA = 0.000 CFI = 1.000 Mardia's = 0.652	P = 0.383 SRMR = 0.011 TLI = 1.003
Informed		D2_1 D2_2 D2_3	X ² /df = 3.947 RMSEA = 0.082 CFI = 0.994 Mardia's = 22.884	P = 0.047 SRMR = 0.015 TLI = 0.983 Bollen Stine = 0.138
S_HostVisa		E2_10 E2_9	X ² /df = 0.455 RMSEA = 0.000 CFI = 1.000 Mardia's = 15.040	P = 0.769 SRMR = 0.004 TLI = 1.004 Bollen Stine = 0.709
S_HostImage	E2_8 E2_7 E2_6	E2_3 E2_2 E2_1	X ² /df = 0.690 RMSEA = 0.000 CFI = 1.000 Mardia's = 9.231	P = 0.406 SRMR = 0.006 TLI = 1.002 Bollen Stine = 0.337
S_SOCIALEXP		E3_21 E3_22 E2_4	X ² /df = 1.252 RMSEA = 0.024 CFI = 1.000	P = 0.263 SRMR = 0.003 TLI = 0.999

		E2_5	Mardia's = 24.321	Bollen Stine = 0.285
S_HeiReputation	E3_5	E3_4	X ² /df = 2.108	P = 0.147
	E3_6	E3_3	RMSEA = 0.051	SRMR = 0.055
		E3_2	CFI = 0.999	TLI = 0.996
			Mardia's = 15.417	Bollen Stine = 0.172
S_HeiSupport	E3_10	E3_13	X ² /df = 0.218	P = 0.640
	E3_11	E3_12	RMSEA = 0.000	SRMR = 0.001
	E3_15	E3_14	CFI = 1.000	TLI = 1.002
			Mardia's = 11.618	Bollen Stine = 0.653
S_HeiLocation	E3_20	E3_19	X ² /df = 0.633	P = 0.426
		E3_18	RMSEA = 0.000	SRMR = 0.006
		E3_17	CFI = 1.000	TLI = 1.002
			Mardia's = 19.911	Bollen Stine = 0.517
OVERALL_SATIS	E1_1	E1_6	X ² /df = 1.556	P = 0.211
	E1_5	E1_4	RMSEA = 0.036	SRMR = 0.008
		E1_3	CFI = 0.999	TLI = 0.997
		E1_2	Mardia's = 15.347	Bollen Stine = 0.341

4.2.3 Step 3: Multi-Factor Model Analysis

After each construct was analysed using the one-factor congeneric model, the next step was to combine these constructs into multi-factor (measurement) models. The multi-factor models were then evaluated based on the measurement model validity (see Section 3.1.6.4) of Chapter 3). The purpose of model validity evaluation was to: 1) examine if the model adequately explains the sample data; 2) ensure there is no factor cross loading; 3) validating constructs before putting them together in the structural model (Hsieh & Hiang, 2004; Schumacker & Lomax, 2004; Hair et al., 2010; Sekaran & Bougie, 2010; Pallant, 2011; Kline, 2015). The three multi-factor models examined in this study were push factors, pull factors and satisfaction related. These multi-factor models explained international students' choice and decision-making for selecting a private HEI in Malaysia. Additionally, international students' satisfaction towards specific key factors that they had previously used in their decision-making and their overall satisfaction were also determined.

4.2.3.1 Push Factors Multi-Factor Model Validity

The multi-factor model for push factors consisted of three constructs: home country limited accessibility, personal development and personal perception. These three constructs were the push factors identified within the home country. It is believed that these push factors initiated the international students' intention to leave their home country for an overseas education. The evaluation process of measurement model validity began with the assessment of the adequacy of parameter estimates, followed by the examination of construct validity, and finally, evaluating the goodness of fit of the model.

4.2.3.1.1 Parameter Estimates

According to Byrne (2000), the review of the adequacy of parameter estimates begins with an inspection of the feasibility of the parameter estimates. All parameter estimates should have the correct sign and size that is consistent with the underlying theory. Next, standard error values should be small to indicate an accurate estimation. There is, however, no definite measure in regard to 'how small' a standard error should be. Lastly, parameter estimates should be statistically significant based on a probability level of 0.05, with a critical ratio greater than ± 1.96 .

Table 4.14 Parameter estimates of push factors multi-factor model

Regression Weights			Estimate	SE	CR	P
A1_3	<---	Home_Limit	.903	.043	20.948	***
A1_4	<---	Home_Limit	1.000			
A1_5	<---	Home_Limit	.888	.041	21.582	***
A1_16	<---	P_Development	.867	.052	16.810	***
A1_18	<---	P_Development	1.000			
A1_19	<---	P_Development	.996	.052	19.112	***
A1_13	<---	P_Perception	.910	.057	16.099	***
A1_12	<---	P_Perception	1.000			
A1_11	<---	P_Perception	.967	.061	15.977	***
Covariances			Estimate	SE	CR	P
Home_Limit	<-->	P_Development	-.015	.072	-.203	.839
Home_Limit	<-->	P_Perception	.734	.110	6.652	***

Regression Weights		Estimate	SE	CR	P
P_Development	<--> P_Perception	.350	.055	6.367	***
Variances		Estimate	SE	CR	P
Home_Limit		2.728	.232	11.780	***
P_Development		.660	.061	10.740	***
P_Perception		1.225	.130	9.392	***
e1		1.144	.102	11.193	***
e2		.515	.087	5.904	***
e3		.963	.091	10.532	***
e7		.416	.034	12.149	***
e8		.190	.028	6.806	***
e9		.261	.030	8.590	***
e10		.601	.061	9.922	***
e11		.641	.069	9.297	***
e12		.717	.070	10.200	***

Note: *** means value is statistically significant at 0.05 level

The parameter estimates for regression weights (unstandardised factor loadings), covariances (for factors only) and variances (for both factors and measurement errors) were presented in Table 4.14. The unstandardised regression coefficients were displayed in the ‘Estimate’ column, standard error in the ‘SE’ column, *t*-values in the ‘CR’ (Critical Ratio) column, and *p* values in the ‘P’ column, to indicate statistical significance. The table revealed that all regression coefficients and variances had positive values. This implied that each construct contained sufficient information to explain the model. Standard error values were small, which implied a high level of accuracy in the model estimated. Last but not least, the CR values were greater than ± 1.96 . This signified that all parameter estimates were statistically significant at 5% level of significance.

4.2.3.1.2 Construct Validity

Construct validity is the extent to which a set of measured items actually reflects the theoretical latent construct those items are designed to measure (Hair et al., 2010). In other words,

evidence of construct validity suggests that items in the model measure the theory accurately (Hsieh & Hsiang, 2004). Construct validity is measured through convergent and discriminant validity. According to Pallant (2011), construct validity is tested through an overlapping test of convergent and discriminant validity, an evaluation process that concurrently measures against the other instead of an external standard. Discussions on construct validity were presented in Section 3.1.12 of Chapter 3.

4.2.3.1.3 Convergent Validity

As discussed in the previous chapter, Section 3.1.6.4 (under section reliability and validity), convergent validity can be assessed by reviewing items' factor loadings, average variance extracted (AVE), as well as the construct reliability (Hair et al., 2010).

- **Factor Loadings:** Factor loadings of all items in the push factors multi-factor model were greater than 0.70, which was above the general rule of thumb of 0.50 or higher for factor loadings, as suggested by Hair et al. (2010). This showed that all the scale items were strongly related with respect to their associated constructs.
- **Average Variance Extracted (AVE):** Bagozzi and Yi (1988) and Hair et al. (2010) suggest that AVE should have a value 0.50 or higher to indicate adequate convergent validity. All constructs in this study's measurement model had AVE greater than 0.60.
- **Reliability:** According to Bagozzi and Yi (1988), the CR value should be equal or greater than 0.6 and the CR value of all constructs in this study was above 0.80. For item reliability, all items in this model had SMC greater than 0.50, which met the minimum requirement as recommended by Robinson et al. (1991). The reliability test supported that all items consistently represent the same latent construct.

Table 4.15 presented a summary of the assessment of the push factors multi-factor model. All constructs provided a good fit with high factor loadings (above 0.70), AVE greater than 0.60 and CR value above 0.80. In summary, this measurement model achieved adequate convergent validity.

Table 4.15 Summary of the assessment of the push factors multi-factor model

Construct	Standardized Estimate Loadings	Item Reliability (SMC)	Construct Reliability (CR)	Average Variance Estimates (AVE)
Home_Limit				
A1_3	0.81	0.66	0.89	0.73
A1_4	0.92	0.84		
A1_5	0.83	0.69		
P_Development				
A1_16	0.74	0.54	0.86	0.68
A1_18	0.88	0.78		
A1_19	0.85	0.72		
P_Perception				
A1_13	0.79	0.63	0.84	0.63
A1_12	0.81	0.66		
A1_11	0.78	0.62		

4.2.3.1.4 Discriminant Validity

Table 4.16 Inter-factor correlations and square root of AVE table

	CR	AVE	MSV	P_Development	Home_Limit	P_Perception
P_Development	0.863	0.679	0.152	0.824		
Home_Limit	0.890	0.731	0.162	-0.011	0.855	
P_Perception	0.838	0.633	0.162	0.390	0.402	0.796

Discriminant validity is the extent to which a construct is unique and truly different from other constructs. As discussed in Chapter 3 Section 3.1.6.2.5, comparing AVE values with maximum shared variance (MSV) can prove discriminant validity (Hu & Bentler, 1999). The push factors multi-factor model achieved discriminant validity as the MSV values were smaller than the AVE values for each construct ($MSV < AVE$) and the square root of AVE (figures displayed in bold in Table 4.16) were also greater than any inter-factor correlations (Hu & Bentler, 1999).

This implied that all the constructs in this measurement model were significantly different from each other. There was no multicollinearity among these three independent variables since each construct was unique.

4.2.3.1.5 First Order of Push Factors Multi-Factors Model Fit and Diagram Path

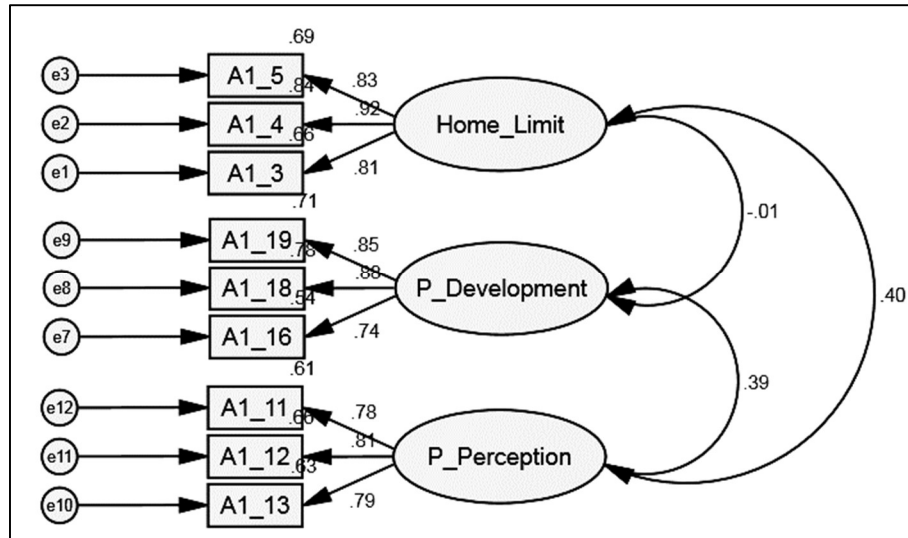


Figure 4.25 First order multi-factor model of push factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

The multi-factor model of push factors was represented by three factors that were: home country limited accessibility (Home_Limit), personal development (P_Development) and personal perception (P_Perception) (see Figure 4.25). The goodness of fit demonstrated an adequate fit where $(X^2)/df = 78.571/24$, $p = 0.000$, $X^2 /df = 3.274$, CFI = 0.973, TLI = 0.960, RMSEA = 0.072, SRMR = 0.046. Although the chi-square test of the hypothesised model indicated a poor fit ($p = 0.00 < 0.05$), the other fit indices suggested a substantial good fit of the model. As discussed in Chapter 3 Section 3.1.6.3.3.1, chi-square (X^2) statistics are sensitive towards big sample size particularly above 200, thus causing a tendency to inflate the X^2 value (Hair et al., 1992, 2010; Byrne, 2000; Schumacker & Lomax, 2004). Hence the statistically significant probability level from the chi-square test in this model was arguably due to the large sample size ($N = 435$).

4.2.3.1.6 Second Order of Push Factors Multi-Factors Model Fit and Diagram Path

Figure 4.26 shows the second order of push factors multi-factor model and diagram path. Both personal development and personal perception constructs were loaded into a higher order

ranking construct called personal. The model fit indices demonstrated this second order model fitted the data adequately where $(X^2)/df = 78.635/24$, $p = 0.000$, $X^2 /df = 3.274$, CFI = 0.973, TLI = 0.960, RMSEA = 0.072, SRMR = 0.046.

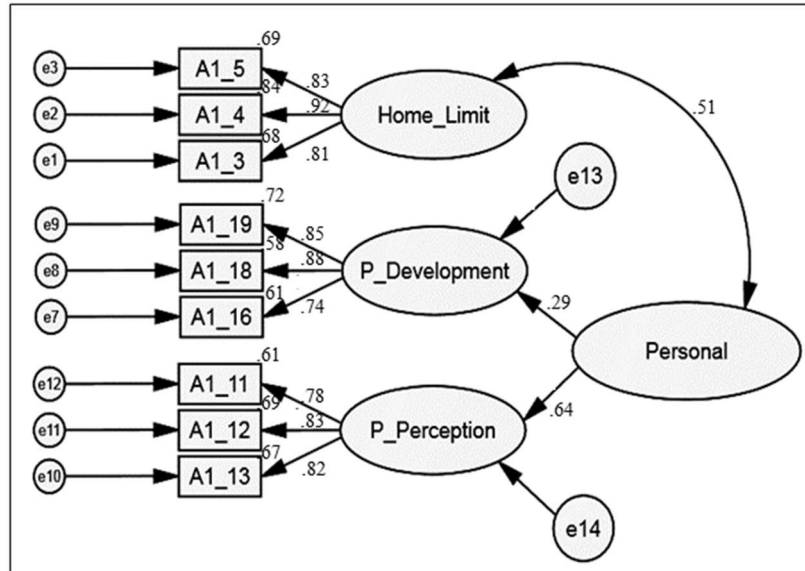


Figure 4.26 Second order multi-factor model of push factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

4.2.3.2 Pull Factors Multi-Factor Model Validity

The same methods discussed above were applied to assess measurement validity of the multi-factor model of pull factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs. This multi-factor model consisted of twelve constructs: namely, host country migration system; host country political stability and safety; host country visa processing; host country image; host country social and cultural diversity; host country attitude towards foreigners; institution image and reputation; institution recognition and employability; institution location; institution program and course; institution ease of entry; and institution facilities and support. These twelve constructs were the pull factors within the host country that attracted international students to choose it as a country destination, its HEI and course over competitors for their overseas education.

The pull factor multi-factor model was respecified as a prelude to testing its measurement validity. Factor institution image and reputation (*Hei_Image*) and institution recognition and employability (*Hei_Recognition*) were found to be highly correlated with a correlation coefficient of 0.83. This was an indication that there was a collinearity issue with these two

constructs (see Section 3.1.5.2.5 of Chapter 3). These two constructs were combined and renamed as institution reputation & recognition (*Hei_Reognition*). The re-specification process continued with an inspection of modification indices. The measurement error covariance between item (C3_2) '*It is internationally recognised*' and (C3_4) '*It has high international education institution ranking*' was high at 99.335 with a parameter change value of 0.269. A decision to co-vary the error terms of both items (e17 <-> e18) was introduced. Likewise, the measurement error covariance between item (C3_9) '*It has high employment rate for its graduates*' and item (C3_8) '*It increases my employability upon graduation*' was also high at 39.294 with a parameter change value of 0.125. The same solution was applied to co-vary the error terms of both items (e20<-> e23). In a further re-specification iteration, 4 items from the measurement model were dropped due to low item reliability (SMC): B3_10, C3_22m C3_1, C3_5. After the respecified model attained model fit, the pull factor multi-factor model was then tested for measurement validity. The next section shows the measurement validity results of the re-specified pull factor multi-factor model.

4.2.3.2.1 Parameter Estimates

The parameter estimates presented in Table 4.17 were regression weights (unstandardised factor loadings), covariances (for factors only) and variances (for both factors and measurement errors). The unstandardised regression coefficients were presented in the 'Estimate' column, standard error in the 'SE' column, *t*-values in the 'CR' (Critical Ratio) column, and *p* values in the 'P' column to indicate statistical significance. The table revealed that all parameter estimates were feasible and were in correct signs and size, indicating that each construct contained sufficient information to explain the model. Standard error values were small which further implied a high level of accuracy in the model estimated. Last but not least, CR values were greater than ± 1.96 , thus signifying that all parameter estimates were statistically significant based on a probability level of 0.05. The parameter estimates of the pull factors multi-factor model passed the adequacy test as suggested by Byrne (2000).

Table 4.17 Parameter estimates of pull factors multi-factor model

Regression Weights			Estimate	SE	CR	P
B3_22	<---	Host_Migration	1.000			
B3_24	<---	Host_Migration	.933	.071	13.142	***
B3_23	<---	Host_Migration	1.234	.088	14.055	***

Regression Weights			Estimate	SE	CR	P
B3_7	<---	Host_Culture	.965	.077	12.559	***
B3_8	<---	Host_Culture	1.000			
B3_3	<---	Host_Image	1.000			
B3_4	<---	Host_Image	.996	.053	18.656	***
B3_2	<---	Host_Image	.872	.057	15.177	***
B3_13	<---	Host_Stability	1.029	.090	11.422	***
B3_14	<---	Host_Stability	1.000			
B3_21	<---	Host_Visa	.854	.092	9.271	***
B3_20	<---	Host_Visa	1.000			
B3_5	<---	Host_Attitude	.964	.065	14.742	***
B3_6	<---	Host_Attitude	1.000			
C3_9	<---	Hei_Recognition	1.000			
C3_7	<---	Hei_Recognition	1.083	.051	21.436	***
C3_6	<---	Hei_Recognition	1.010	.050	20.321	***
C3_8	<---	Hei_Recognition	.981	.038	25.740	***
C3_26	<---	Hei_Location	1.000			
C3_25	<---	Hei_Location	1.024	.053	19.407	***
C3_27	<---	Hei_Location	.895	.058	15.352	***
C3_16	<---	Hei_Program	1.000			
C3_14	<---	Hei_Program	1.086	.073	14.916	***
C3_15	<---	Hei_Program	1.223	.076	16.182	***
C3_13	<---	Hei_Program	.912	.065	13.989	***
C3_21	<---	Hei_Entry	1.063	.082	12.909	***
C3_20	<---	Hei_Entry	1.000			
C3_30	<---	Hei_Facility	1.000			
C3_28	<---	Hei_Facility	1.040	.050	20.891	***
C3_29	<---	Hei_Facility	1.048	.054	19.345	***
C3_4	<---	Hei_Recognition	.899	.053	16.858	***
C3_2	<---	Hei_Recognition	.891	.051	17.416	***
Covariances			Estimate	SE	CR	P

Regression Weights			Estimate	SE	CR	P
Host_Migration	<-->	Host_Culture	.163	.060	2.713	.007
Host_Migration	<-->	Host_Image	.428	.070	6.112	***
Host_Migration	<-->	Host_Stability	.387	.081	4.759	***
Host_Migration	<-->	Host_Visa	.730	.114	6.424	***
Host_Migration	<-->	Host_Attitude	.636	.092	6.922	***
Host_Migration	<-->	Hei_Recognition	.368	.068	5.422	***
Host_Migration	<-->	Hei_Location	.269	.064	4.216	***
Host_Migration	<-->	Hei_Program	.159	.048	3.313	***
Host_Migration	<-->	Hei_Entry	.439	.074	5.909	***
Host_Culture	<-->	Host_Image	.333	.051	6.561	***
Host_Culture	<-->	Host_Stability	.294	.059	4.939	***
Host_Culture	<-->	Host_Visa	.272	.073	3.715	***
Host_Culture	<-->	Host_Attitude	.477	.066	7.271	***
Host_Culture	<-->	Hei_Recognition	.245	.048	5.051	***
Host_Culture	<-->	Hei_Location	.272	.048	5.652	***
Host_Culture	<-->	Hei_Program	.239	.039	6.177	***
Host_Culture	<-->	Hei_Entry	.238	.051	4.691	***
Host_Culture	<-->	Hei_Facility	.339	.054	6.274	***
Host_Image	<-->	Host_Stability	.505	.068	7.451	***
Host_Image	<-->	Host_Visa	.421	.080	5.274	***
Host_Image	<-->	Host_Attitude	.678	.075	9.093	***
Host_Image	<-->	Hei_Recognition	.477	.057	8.340	***
Host_Image	<-->	Hei_Location	.396	.053	7.488	***
Host_Image	<-->	Hei_Program	.302	.042	7.176	***
Host_Image	<-->	Hei_Entry	.381	.057	6.662	***
Host_Image	<-->	Hei_Facility	.482	.060	8.018	***
Host_Stability	<-->	Host_Visa	.544	.099	5.484	***
Host_Stability	<-->	Host_Attitude	.573	.083	6.909	***
Host_Stability	<-->	Hei_Recognition	.211	.060	3.517	***
Host_Stability	<-->	Hei_Location	.198	.059	3.363	***

Regression Weights			Estimate	SE	CR	P
Host_Stability	<-->	Hei_Program	.148	.045	3.282	.001
Host_Stability	<-->	Hei_Entry	.226	.063	3.590	***
Host_Stability	<-->	Hei_Facility	.280	.066	4.263	***
Host_Visa	<-->	Host_Attitude	.558	.101	5.541	***
Host_Visa	<-->	Hei_Recognition	.347	.078	4.450	***
Host_Visa	<-->	Hei_Location	.218	.074	2.937	.003
Host_Visa	<-->	Hei_Program	.148	.057	2.626	.009
Host_Visa	<-->	Hei_Entry	.391	.083	4.719	***
Host_Visa	<-->	Hei_Facility	.437	.085	5.114	***
Host_Attitude	<-->	Hei_Recognition	.466	.067	6.933	***
Host_Attitude	<-->	Hei_Location	.378	.063	5.982	***
Host_Attitude	<-->	Hei_Program	.263	.049	5.406	***
Host_Attitude	<-->	Hei_Entry	.392	.069	5.724	***
Host_Attitude	<-->	Hei_Facility	.551	.074	7.483	***
Hei_Recognition	<-->	Hei_Location	.462	.055	8.384	***
Hei_Recognition	<-->	Hei_Program	.459	.050	9.241	***
Hei_Recognition	<-->	Hei_Entry	.445	.060	7.413	***
Hei_Recognition	<-->	Hei_Facility	.633	.066	9.536	***
Hei_Location	<-->	Hei_Program	.406	.045	8.949	***
Hei_Location	<-->	Hei_Entry	.452	.059	7.714	***
Hei_Location	<-->	Hei_Facility	.641	.064	10.015	***
Hei_Program	<-->	Hei_Entry	.348	.047	7.398	***
Hei_Program	<-->	Hei_Facility	.424	.050	8.549	***
Hei_Entry	<-->	Hei_Facility	.536	.067	8.018	***
Host_Migration	<-->	Hei_Facility	.431	.074	5.806	***
e17	<-->	e18	.275	.035	7.930	***
e20	<-->	e23	.170	.029	5.949	***
Variances			Estimate	SE	CR	P
Host_Migration			1.381	.183	7.527	***
Host_Culture			.754	.085	8.817	***

Regression Weights	Estimate	SE	CR	P
Host_Image	.845	.085	9.886	***
Host_Stability	1.196	.144	8.313	***
Host_Visa	1.752	.246	7.119	***
Host_Attitude	1.209	.135	8.959	***
Hei_Recognition	.905	.092	9.890	***
Hei_Location	.832	.077	10.864	***
Hei_Program	.480	.059	8.185	***
Hei_Entry	.844	.105	8.066	***
Hei_Facility	1.012	.101	10.063	***
e1	1.545	.127	12.132	***
e2	1.054	.094	11.259	***
e3	.628	.108	5.817	***
e5	.312	.053	5.862	***
e6	.279	.056	5.005	***
e7	.397	.041	9.775	***
e8	.321	.037	8.741	***
e9	.666	.053	12.591	***
e10	.718	.109	6.587	***
e11	.510	.098	5.183	***
e12	1.067	.144	7.406	***
e13	1.073	.185	5.785	***
e14	.610	.072	8.447	***
e15	.667	.078	8.537	***
e17	.528	.041	13.020	***
e18	.601	.046	13.187	***
e20	.492	.040	12.233	***
e21	.290	.028	10.182	***
e22	.351	.031	11.472	***
e23	.376	.032	11.703	***
e24	.247	.033	7.586	***

Regression Weights	Estimate	SE	CR	P
e25	.418	.041	10.068	***
e26	.769	.059	12.950	***
e27	.460	.036	12.664	***
e28	.383	.033	11.770	***
e29	.278	.029	9.559	***
e30	.368	.029	12.575	***
e32	.394	.066	5.937	***
e33	.614	.068	9.014	***
e34	.491	.044	11.193	***
e35	.329	.036	9.017	***
e36	.532	.048	11.144	***

Note: *** means *p* value is statistically significant at 0.05 level

4.2.3.2.2 Construct Validity

The construct validity of pull factors multi-factor model was determined through convergent and discriminant validity. This was to ensure that items in this measurement model measured the theory accurately (Hsieh & Hiang, 2004). The same evaluation process as discussed above in Section 4.2.3.1 was applied here: a review on items' factor loadings, AVE, as well as the construct reliability (Hair et al., 2010). A summary of the pull factors measurement model (standardised regression weights, item reliability (SMC), construct reliability (CR) and average variance estimates (AVE)) was displayed in Table 4.18. The same threshold values were used here: A minimum standardised factor loading of 0.50 was essential (Hair et al, 2010); SMC preferably above 0.50 (Robinson et al., 1991); CR should be 0.60 or greater, as suggested by Bagozzi & Yi (1988) and, lastly, AVE of 0.50 or above to indicate that a construct has adequate convergent validity (Fornell & Larcker, 1981). Table 4.18 showed that all constructs had high factor loadings (above 0.60), SMC very close to 0.50 or greater, AVE above 0.50 and CR value above 0.70. In summary, the pull factors multi-factor model achieved adequate convergent validity.

Table 4.18 Summary of the assessment of pull factors multi-factor model

Construct	Standardised Estimate Loadings	Item Reliability (SMC)	Construct Reliability (CR)	Average Variance Estimates (AVE)
Host_Migration				
B3_22	0.69	0.47	0.81	0.59
B3_24	0.73	0.53		
B3_23	0.88	0.77		
Host_Culture				
B3_7	0.83	0.69	0.83	0.71
B3_8	0.85	0.73		
Host_Image				
B3_3	0.83	0.68	0.84	0.63
B3_4	0.85	0.72		
B3_2	0.70	0.49		
Host_Stability				
B3_13	0.80	0.64	0.80	0.67
B3_14	0.84	0.70		
Host_Visa				
B3_21	0.74	0.56	0.74	0.58
B3_20	0.79	0.62		
Host_Attitude				
B3_5	0.81	0.65	0.79	0.65
B3_6	0.80	0.65		
Hei_Recognition				
C3_2	0.76	0.58	0.92	0.66

C3_4	0.74	0.55		
C3_6	0.85	0.73		
C3_7	0.89	0.79		
C3_9	0.81	0.65		
C3_8	0.84	0.70		
Hei_Location				
C3_26	0.88	0.77	0.84	0.64
C3_25	0.82	0.68		
C3_27	0.68	0.46		
Hei_Program				
C3_16	0.72	0.51	0.85	0.59
C3_14	0.77	0.60		
C3_15	0.85	0.71		
C3_13	0.73	0.52		
Hei_Entry				
C3_21	0.84	0.71	0.78	0.64
C3_20	0.76	0.58		
Hei_Facility				
C3_30	0.82	0.67	0.88	0.71
C3_28	0.88	0.77		
C3_29	0.82	0.68		

4.2.3.2.3 Discriminant Validity

Table 4.19 Inter-factor correlations and square root of AVE table

	CR	AVE	MSV	Hei_Entry	Host_Migration	Host_Culture	Host_Image	Host_Stability	Host_Visa	Host_Attitude	Hei_Recognition	Hei_Location	Hei_Program	Hei_Facility
Hei_Entry	0.782	0.643	0.336	0.802										
Host_Migration	0.811	0.591	0.242	0.407	0.769									
Host_Culture	0.831	0.711	0.250	0.298	0.159	0.843								
Host_Image	0.836	0.632	0.450	0.451	0.396	0.418	0.795							
Host_Stability	0.802	0.669	0.253	0.225	0.301	0.309	0.503	0.818						
Host_Visa	0.736	0.583	0.220	0.322	0.469	0.237	0.346	0.376	0.763					
Host_Attitude	0.785	0.646	0.450	0.388	0.492	0.500	0.671	0.477	0.383	0.804				
Hei_Recognition	0.922	0.664	0.484	0.509	0.329	0.296	0.545	0.203	0.275	0.445	0.815			
Hei_Location	0.839	0.637	0.489	0.539	0.250	0.343	0.472	0.199	0.180	0.376	0.533	0.798		
Hei_Program	0.850	0.587	0.484	0.546	0.195	0.397	0.475	0.196	0.162	0.345	0.696	0.642	0.766	
Hei_Facility	0.878	0.706	0.489	0.580	0.365	0.389	0.521	0.254	0.328	0.498	0.661	0.699	0.609	0.840

Table 4.19 showed that the model achieved discriminant validity based on the evidence that the square root of AVE (figures displayed in bold in Table 4.19) was greater than any inter-factor correlations. MSV was also smaller than the AVE for each construct ($MSV < AVE$). This implied that all the constructs in the measurement model were significantly different from each other. There was no multicollinearity among these eleven independent variables.

4.2.3.2.4 First Order of Pull Factors Multi-Factor Model Fit and Diagram Path

Figure 4.27 presented the first order multi-factor model of pull factors influencing international students' choice and decision-making for selecting a private HEI in Malaysia. This multi-factor model was represented by eleven factors which were: host country migration system; host country social and cultural diversity; host country image; host country political stability and safety; host country visa processing; host country attitude towards foreigners; institution reputation and recognition; institution location; institution program; and course, institution ease of entry; and institution facilities and support (see Figure 4.27). The goodness of fit demonstrated an adequate fit where $(X^2)/df = 752.631/121$, $p = 0.000$, $X^2 / df = 1.849$, CFI = 0.957, TLI = 0.947, RMSEA = 0.044, SRMR = 0.037. Despite the chi-square test of the hypothesised model indicating a poor fit ($p = 0.00$, $p < 0.05$), other fit indices suggested substantial good fit of the model. It is important to note that the statistically significant probability level from the chi-square (X^2) test in this model was possibly due to the large sample size ($N = 435$). According to Byrne (2000), Hair et al. (1992 and 2010), X^2 statistics are particularly sensitive towards sample size and a big sample size above 200 cases might have a tendency to have the X^2 value inflated (Schumacker & Lomax, 2004).

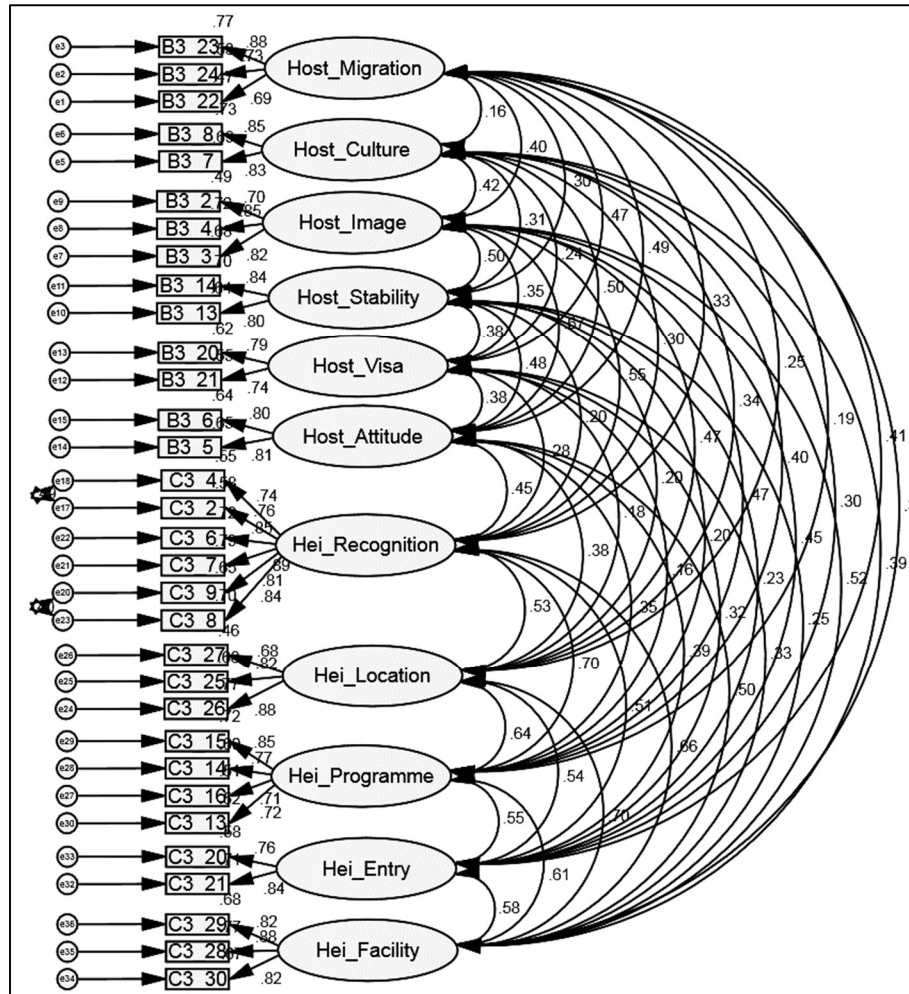


Figure 4.27 First-order multi-factor model of pull factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

4.2.3.2.5 Second Order of Pull Factors Multi-Factors Model Fit and Diagram Path

Figure 4.28 showed the second order of pull factors multi-factor model and the model diagram path. The eleven constructs in this measurement model were grouped into two higher order constructs, namely: host country factor (*Host_Country*) and institutional factor (*Institutional*). The model fit indices demonstrated this model achieved adequate fit where $(X^2)/df = 899.278/450$, $p = 0.000$, $X^2/df = 1.998$, CFI = 0.944, TLI = 0.938, RMSEA = 0.048, SRMR = 0.055.

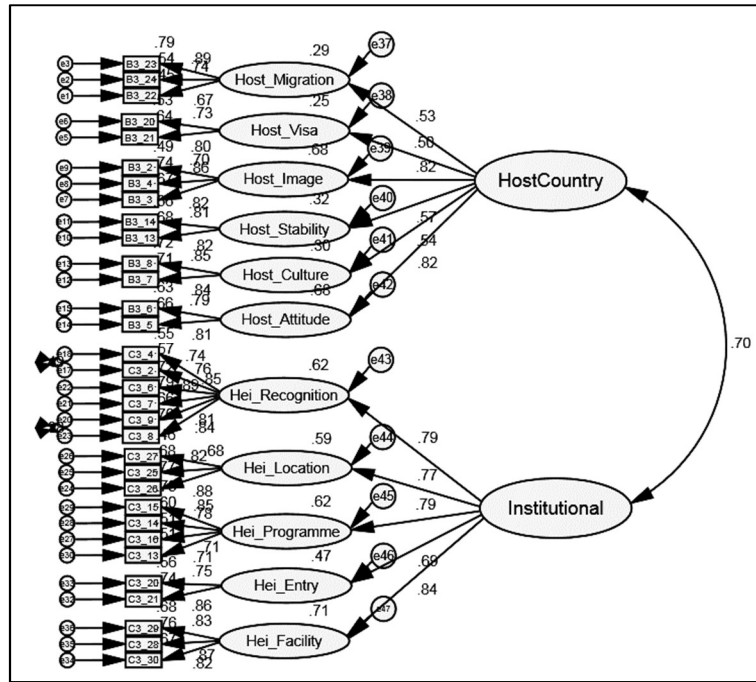


Figure 4.28 Second-order multi-factor model of pull factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

4.2.3.3 Satisfaction Multi-Factor Model Validity

In this section the satisfaction multi-factor model validity pertaining to international students' perception and satisfaction was ascertained. This multi-factor model consisted of six constructs explaining respondents' satisfaction: HEI recognition and reputation; HEI location and safety; supportive learning environment; social experience; host country image; and host country migration and visa system. These six constructs were identified as satisfaction drivers that were used to measure international students' satisfaction towards the decision that they have made based on the key influencing factors. The same evaluation process used to test for the two measurement models (push factors model and pull factors model) above for measurement model validity was applied here. The evaluation process involved checking the adequacy of parameter estimates, assessing construct validity and discriminant validity and assessment of measurement model fit.

4.2.3.3.1 Parameter Estimates

Table 4.20 presented the parameter estimates of all items in the measurement model (regression weights displayed are the unstandardised factor loadings, covariances for factors only and variances for both factors and measurement errors; the unstandardised regression coefficients were presented in the 'Estimate' column, standard error in the 'SE' column, *t*-values in the

‘CR’ (Critical Ratio) column, and *p* values in the ‘P’ column to indicate statistical significance). All parameter estimates were feasible and were in correct signs and size, indicating that each construct contained sufficient information to explain the model. Small standard error values indicated a high level of accuracy in the model estimated. Last but not least, CR values were greater than ± 1.96 , which indicate that all parameter estimates were statistically significant based on a probability level of 0.05. The satisfaction multi-factor model undoubtedly passed the adequacy test (Byrne, 2000).

Table 4.20 Parameter estimates of satisfaction multi-factor model

Regression Weights			Estimate	S.E.	C.R.	P
E3_2	<---	S_HeiReputation	1.000			
E3_3	<---	S_HeiReputation	1.159	.043	26.896	***
E3_4	<---	S_HeiReputation	1.125	.046	24.342	***
E3_17	<---	S_HeiLocation	1.000			
E3_18	<---	S_HeiLocation	.975	.054	18.218	***
E3_19	<---	S_HeiLocation	.937	.058	16.282	***
E2_4	<---	S_SOCIALEXP	1.000			
E3_22	<---	S_SOCIALEXP	1.440	.087	16.581	***
E3_21	<---	S_SOCIALEXP	1.389	.083	16.674	***
E2_5	<---	S_SOCIALEXP	.903	.049	18.475	***
E3_14	<---	S_HeiSupport	1.000			
E3_12	<---	S_HeiSupport	1.026	.036	28.493	***
E3_13	<---	S_HeiSupport	1.047	.035	30.136	***
E2_1	<---	S_HostImage	1.000			
E2_2	<---	S_HostImage	1.077	.050	21.453	***
E2_3	<---	S_HostImage	.765	.053	14.334	***
E2_9	<---	S_HostVisa	1.000			
E2_10	<---	S_HostVisa	1.002	.064	15.560	***
Covariances			Estimate	SE	CR	P
S_HEIREPUTATION	<-->	S_HeiLocation	.474	.051	9.373	***
S_HEIREPUTATION	<-->	S_SOCIALEXP	.431	.052	8.331	***

Regression Weights			Estimate	S.E.	C.R.	P
S_HEIREPUTATION	<-->	S_HeiSupport	.599	.055	10.807	***
S_HEIREPUTATION	<-->	S_HostImage	.424	.044	9.717	***
S_HEIREPUTATION	<-->	S_HostVisa	.391	.068	5.787	***
S_HEILOCATION	<-->	S_SOCIALEXP	.474	.058	8.108	***
S_HEILOCATION	<-->	S_HeiSupport	.530	.058	9.099	***
S_HEILOCATION	<-->	S_HostImage	.434	.048	8.977	***
S_HEILOCATION	<-->	S_HostVisa	.494	.079	6.291	***
S_SOCIALEXP	<-->	S_HeiSupport	.568	.064	8.919	***
S_SOCIALEXP	<-->	S_HostImage	.432	.051	8.462	***
S_SOCIALEXP	<-->	S_HostVisa	.581	.084	6.936	***
S_HEISUPPORT	<-->	S_HostImage	.510	.051	9.905	***
S_HEISUPPORT	<-->	S_HostVisa	.682	.087	7.866	***
S_HOSTIMAGE	<-->	S_HostVisa	.598	.073	8.167	***
e7	<-->	e10	.416	.050	8.331	***
Variances			Estimate	SE	CR	P
S_HeiReputation			.696	.062	11.193	***
S_HeiLocation			.827	.083	9.959	***
S_SOCIALEXP			.846	.110	7.665	***
S_HeiSupport			.985	.084	11.733	***
S_HostImage			.619	.059	10.482	***
S_HostVisa			1.943	.206	9.413	***
e1			.227	.020	11.088	***
e2			.158	.020	7.868	***
e3			.281	.026	11.007	***
e4			.370	.039	9.384	***
e5			.352	.037	9.382	***
e6			.584	.049	11.833	***
e7			1.054	.076	13.856	***
e8			.316	.042	7.510	***
e9			.247	.038	6.577	***

Regression Weights	Estimate	S.E.	C.R.	P
e10	.707	.052	13.675	***
e11	.258	.023	11.119	***
e12	.223	.022	10.239	***
e13	.163	.019	8.443	***
e14	.239	.025	9.589	***
e15	.180	.025	7.278	***
e16	.514	.038	13.491	***
e17	.791	.118	6.696	***
e18	.377	.109	3.469	***

Note: *** means *p* value is statistically significant at 0.05 level

4.2.3.3.2 Construct Validity

Similarly the construct validity of the satisfaction multi-factor model was measured through convergent and discriminant validity. This was to ensure items in this measurement model measured the theory accurately (Hsieh & Hiang, 2004). The same evaluation process as discussed above in Section 4.2.3.1 was applied here: a review on items' factor loadings, AVE, CR, as well as SMC, as suggested by Hair et al. (2010). The same threshold values were used here: a minimum standardised factor loading of 0.50 or higher (Hair et al., 2010); SMC preferably above 0.50 (Robinson et al., 1991); CR should be at least 0.60 or greater as suggested by Bagozzi and Yi (1988) and, last but not least, AVE of 0.50 or above to substantiate a construct that has adequate convergent validity (Fornell & Larcker, 1981).

Table 4.21 summarised the satisfaction measurement model (standardised regression weights, SMC, CR and AVE values. All items in this measurement model achieved high factor loadings (above 0.60)). This showed that all the scale items were highly loaded with respect to their constructs. Items E2_3 and E2_4 were removed from the model due to low SMC values that were below the recommended threshold of 0.50 (Robinson et al., 1991). The remaining items had SMC 0.50 or higher, AVE above 0.60 and CR value above 0.80. The satisfaction multi-factor model evidently achieved adequate convergent validity.

Table 4.21 Summary of the assessment of the satisfaction multi-factor model

Construct	Standardised Estimate Loadings	Item Reliability (SMC)	Construct Reliability (CR)	Average Variance Estimates (AVE)
S_HeiReputation				
E3_2	0.87	0.75	0.92	0.79
E3_3	0.93	0.86		
E3_4	0.87	0.76		
S_HeiLocation				
E3_17	0.83	0.69	0.85	0.65
E3-18	0.83	0.69		
E3-19	0.75	0.56		
S_SOCIALEXP				
E2_4	0.67	0.45	0.89	0.65
E3_22	0.92	0.85		
E3_21	0.93	0.87		
E2_5	0.70	0.49		
S_HeiSupport				
E3_14	0.89	0.79	0.94	0.83
E3_12	0.91	0.82		
E3_13	0.93	0.87		
S_HostImage				
E2_1	0.85	0.70	0.85	0.65
E2_2	0.89	0.80		
E2_3	0.64	0.41		
S_HostVisa				
E2_9	0.84	0.71	0.87	0.78

E2_10	0.92	0.84		
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4.2.3.3.3 Discriminant Validity

Table 4.22 Inter-factor correlations and square root of AVE table

	CR	AVE	MSV	S_HostImage	S_HeiReputatio	S_HeiLocation	S_SOCIALEXP	S_HeiSupport	S_HostVisa
S_HostImage	0.866	0.763	0.420	0.874					
S_HeiReputation	0.918	0.789	0.523	0.643	0.888				
S_HeiLocation	0.845	0.646	0.389	0.601	0.624	0.804			
S_SOCIALEXP	0.892	0.737	0.384	0.570	0.560	0.569	0.858		
S_HeiSupport	0.935	0.828	0.523	0.648	0.723	0.587	0.620	0.910	
S_HostVisa	0.873	0.775	0.309	0.556	0.336	0.390	0.446	0.492	0.880

Table 4.22 showed that the satisfaction multi-factor model achieved discriminant validity. The square root of AVE (figures displayed in bold in Table 4.22) was greater than all inter-factor correlations and MSV of all constructs in the model were smaller than the AVE ($MSV < AVE$). This implied that all the constructs in the measurement model were significantly different from each other. There was no multicollinearity among these six independent variables since each construct was unique (see Section 3.1.5.2.5 of Chapter 3).

4.2.3.3.4 First Order of Satisfaction Multi-Factor Model Fit and Diagram Path

Figure 4.29 displayed the first order multi-factor measurement model of satisfaction related factors. This measurement model was represented by six satisfaction factors (constructs): HEI recognition and reputation; HEI location and safety; supportive learning environment; social experience; host country image; and host country migration and visa system. The goodness of fit demonstrated an adequate fit where $(X^2)/df = 221.668/89$, $p = 0.000$, $X^2/df = 2.491$, CFI = 0.975, TLI = 0.967, RMSEA = 0.059, SRMR = 0.044. Although the chi-square (X^2) test of the hypothesised model indicated a poor fit ($p = 0.00$, $p < 0.05$), the other fit indices suggested substantial good fit of the model. It is important to note that the statistically significant probability level from the chi-square (X^2) test in this model was probably due to the large sample size ($N = 435$). According to Hair et al. (1992), Byrne (2000) and Hair et al. (2010), X^2 statistics are particularly sensitive towards a large sample size ($N > 200$) and as a result there is a tendency to have the X^2 value inflated (Schumacker & Lomax, 2004).

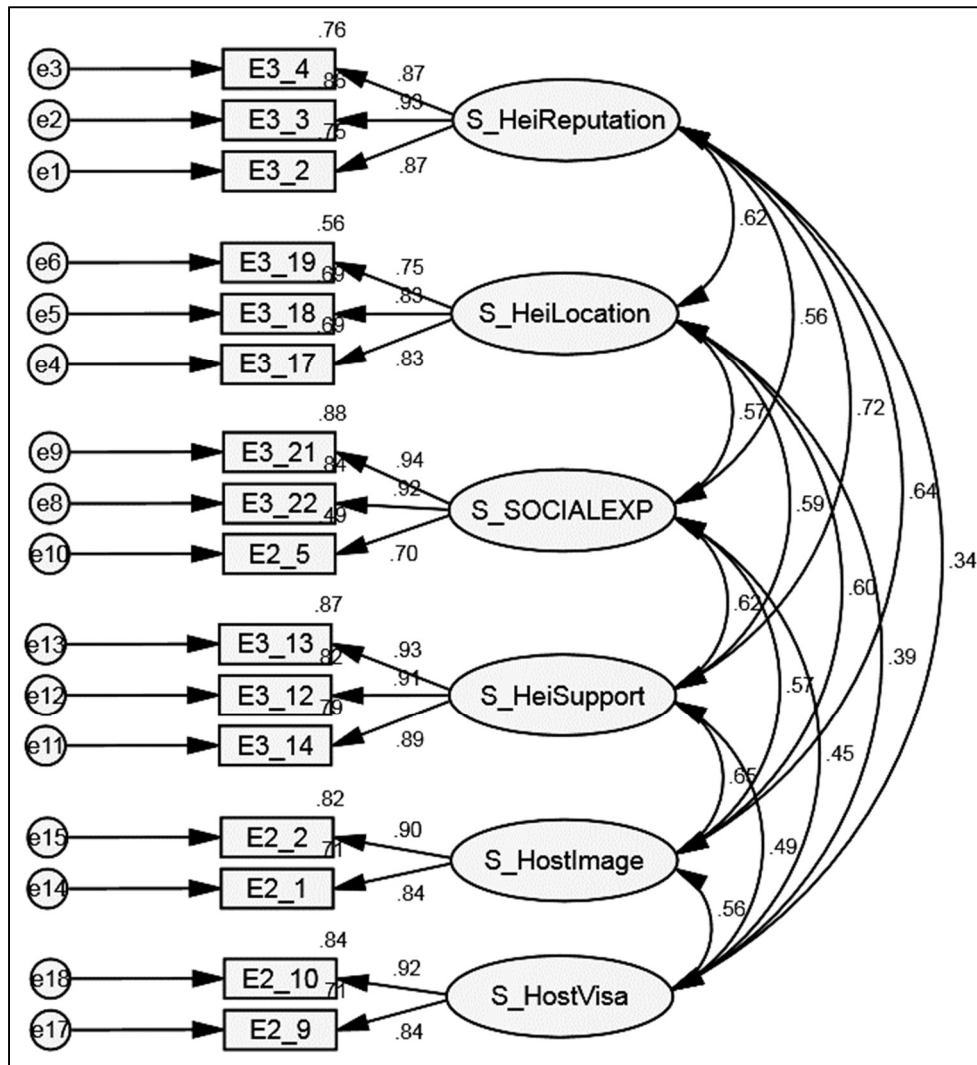


Figure 4.29 First-order factor model of international students' satisfaction

4.2.3.3.5 Second Order of Satisfaction Multi-Factors Model Fit and Diagram Path

Figure 4.30 showed the second order of satisfaction multi-factor model and the model diagram path. Five out of six constructs of this measurement model were separately grouped into two higher order constructs, namely: host country satisfaction factor (HCOUNTRY_SATIS) and institutional satisfaction factor (HEI_SATIS). The model fit indices demonstrated this model achieved adequate fit where $(X^2)/df = 251.821/96$, $p = 0.000$, $X^2/df = 2.623$, CFI = 0.971, TLI = 0.964, RMSEA = 0.061, SRMR = 0.050.

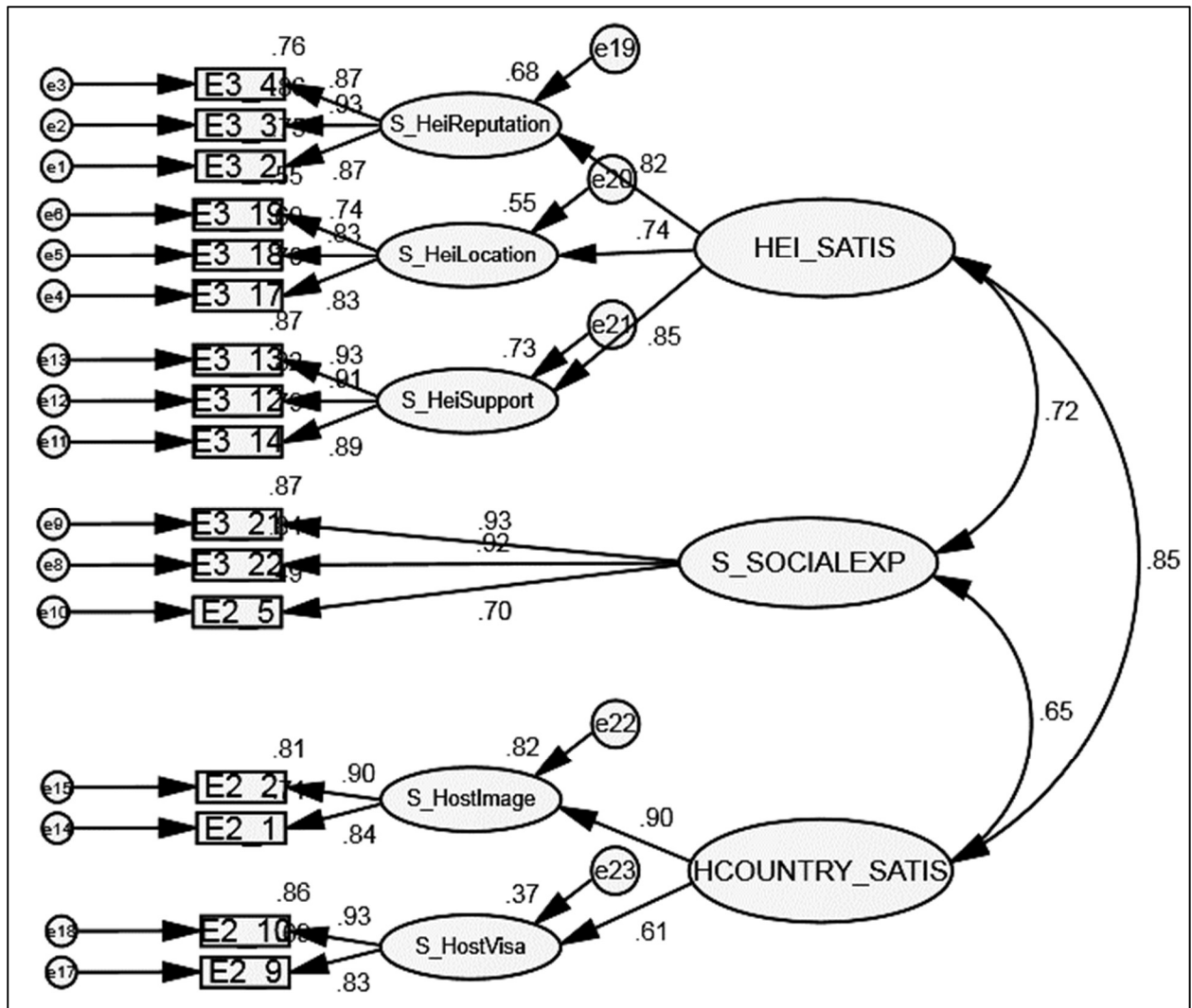


Figure 4.30 Second-order multi-factor model of international students' satisfaction

4.2.4 Step 4: Structural Model Analysis and Hypotheses Testing

The final step of the four-step SEM modelling involved testing the structural model. A structural model imputes relationships between latent variables and specifies how these variables are directly or indirectly influenced or related to each other (Byrne, 2000; Arbuckle, 2011). The structural model is used to test the hypotheses regarding how constructs are theoretically linked and the significance of causal relationships. Section 4.2.4 explains the structural paths and hypotheses testing. Figure 4.31 illustrates the path diagram of the proposed research model.

4.2.4.1 Structural Model Fit and Diagram Path

Figure 4.31 displays the structural model of key factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs. The hypothesised

structural equation model was a combination of the three measurement models (push factors, pull factors and satisfactions) as proposed in Section 4.2.3 and the one-factor congeneric model of overall satisfaction in Section 4.2.24. A path diagram with the standardised estimates for the structural model was illustrated in Figure 4.31. The rectangle items represent the observed variables and measured variables. The ellipses are the latent variables while the measurement of errors is in circles. The causal paths are shown in single-headed arrows while the double-headed arrows represent the correlations between the latent constructs.

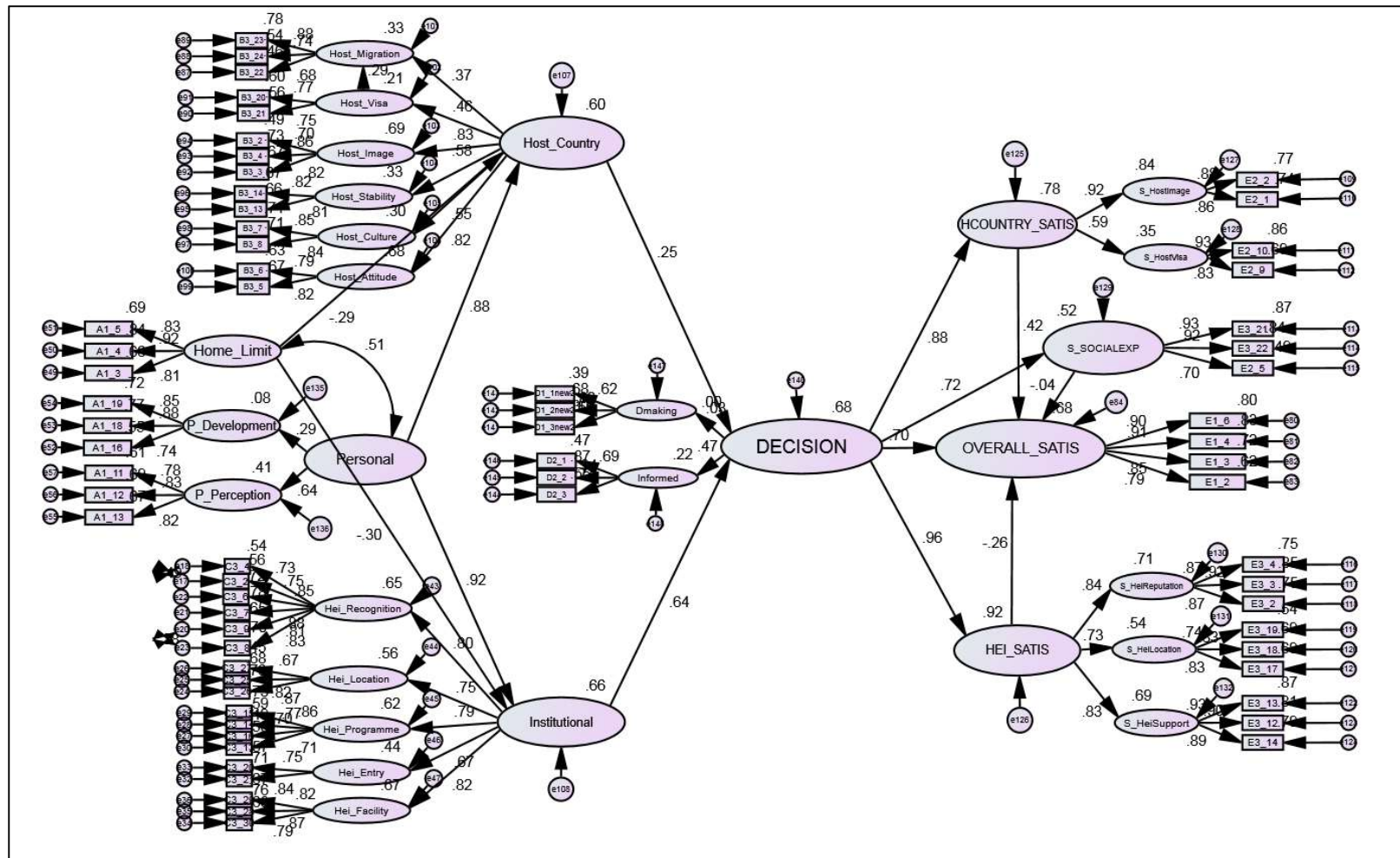


Figure 4.31 Structural model of international student choice and decision-making regarding higher education at Malaysia's private HEIs

The overall fit of the structural model (see Figure 4.31) was satisfactory with all relevant fit indices addressing recommended threshold requirements (see Table 4.11) with $(X^2)/df = 3867.862/2107$, $p = 0.000$, $X^2/df = 1.836$, CFI = 0.909, TLI = 0.905, RMSEA = 0.044, SRMR = 0.061. RMSEA reading of 0.044 was evidence that there was no significant misfit. As discussed earlier in Chapter 3 (Section 3.1.6.3.3.2), RMSEA depicts how well a model fits a population by taking into consideration the error of approximation in the population (Browne & Cudeck, 1992; Hair et al., 2010). RMSEA of 0.05 or less indicates that data fitted the model well as, according to Browne and Cudeck (1992), SRMR of 0.061 was also within the recommended benchmark. According to Kline (2015), the SRMR value for a good fitting model should be less than 0.10. Even though CFI and TLI values were below 0.95, both readings met the cut-off criterion of 0.90. In general the recommended value of CFI is to be greater than 0.90 to indicate a well-fitting model (Bentler, 1992; Hu & Bentler, 1999). Similarly the normed chi-square (X^2/df) value of 1.836 was well below the threshold of 3.0, indicating a good overall model fit.

4.2.4.2 Structural Paths and Hypotheses Testing

Once the structural model (Figure 4.31) has been established and statistically well fitted, the subsequent step was to test the hypotheses proposed for the study by exploring the path significance of each causal relationship. This process also included examining the variance explained by each path in the model. Table 4.23 summarised the causal paths of the proposed model. The first column displayed all the causal paths identified in this model. The hypotheses column exhibited the hypotheses represented by each causal path. The estimates column displayed the unstandardised parameter estimates or regression weights/coefficients of the structural paths. SE is the estimate of standard error of the regression weight, while CR (critical ratio) is a t value obtained by dividing the estimate of the covariance by its standard error. CR values greater than ± 1.96 indicate the statistical significance of the causal path 0.05, a significance level recommended by Arbuckle (2011) for hypothesis testing.

Table 4.23 Structural paths for the model of key factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

Structural Paths			Hypotheses	Estimate	SE	CR	P
Host_Country	<---	Personal	H2a	0.883	.119	6.605	***
Institutional	<---	Personal	H2b	0.923	.342	5.617	***
Institutional	<---	Home_Limit	H1a	-0.301	.099	-3.669	***
Host_Country	<---	Home_Limit	H1b	-0.292	.064	-3.626	***
DECISION	<---	Host_Country	H3	0.249	.046	3.240	.001
DECISION	<---	Institutional	H4	0.643	.057	6.847	***
S_SOCIALEXP	<---	DECISION	H5c	0.723	.212	8.674	***
HCOUNTRY_SATIS	<---	DECISION	H5a	0.881	.151	8.834	***
HEI_SATIS	<---	DECISION	H5b	0.960	.170	8.816	***
OVERALL_SATIS	<---	DECISION	H5d	0.676	1.291	1.198	.231
OVERALL_SATIS	<---	HCOUNTRY_SATIS	H6a	0.420	.251	2.283	.022
OVERALL_SATIS	<---	HEI_SATIS	H6c	-0.256	.662	-.579	.563
OVERALL_SATIS	<---	S_SOCIALEXP	H6b	-0.038	.056	-.618	.537

Note: N = 435; Maximum likelihood estimates; ****p*-value is statistically significant at the 0.01 level (two-tailed)

The model contained thirteen structural paths as reported in Table 4.23. Out of the thirteen paths, ten were statistically significant at 0.05 level of significance. The CR values of these paths were above ± 1.96 as recommended by Byrne (2000) for hypothesis testing. The ten supported hypotheses associated with these statistically significant paths are H1a, H1b, H2a, H2b, H3, H4, H5, H6, H7, and H9. Three hypotheses (H8, H10, and H11) were rejected on the basis that their CR values were below ± 1.96 , or in other words, were statistically insignificant ($p > 0.05$). The hypotheses testing results for the structural paths are presented below in Table 4.24.

Table 4.24 Results of hypotheses testing for Objective 1 and Objective 2

Objective 1: To identify the key push factors and key pull factors influencing international students' decision-making in choosing private HEIs in Malaysia.		
	Hypotheses	Supported (S)/Not

		Supported (NS)
H1a	Limited accessibility to the home country's higher education system is a significant push factor for international students selecting Malaysia as a study destination.	S
H1b	Limited accessibility to the home country's higher education system is a significant push factor for international students selecting a private HEI.	S
H2a	Personal attitude factor is a significant push factor for international students selecting Malaysia as a study destination.	S
H2b	Personal attitude factor is a significant push factor for international students selecting a private HEI.	S
H3	Host country factor is a significant pull factor for international students selecting a private HEI in Malaysia.	S
H4	Institutional factor is a significant pull factor for international students selecting a private HEI in Malaysia.	S

Objective 2: To investigate the relationship between international students' study decisions and their satisfaction levels.

	Hypotheses	Supported (S)/Not Supported (NS)
H5a	There is a positive relationship between international students' study decision and their satisfaction towards Malaysia as a study destination.	S
H5b	There is a positive relationship between international students' study decision and their satisfaction towards their private HEI.	S
H5c	There is a positive relationship between international students' study decision and their satisfaction towards their social experience in Malaysia.	S
H5d	There is a positive relationship between international students' study decision and their overall satisfaction.	NS

H6a	There is a positive relationship between international students' satisfaction towards Malaysia as a study destination and their overall satisfaction.	S
H6b	There is a positive relationship between international students' satisfaction towards their social experience in Malaysia and their overall satisfaction.	NS
H6c	There is a positive relationship between international students' satisfaction towards their private HEI and their overall satisfaction.	NS

As hypothesised by the model (see Figure 4.31), the push factors that initiated international students' intention to study abroad were: home country limited accessibility (*Home_Limit*) and personal attitude (*Personal*) factors. The negative estimates of '*Home_Limit*' in the structural model suggest that limitations in higher education opportunity in the home country 'push' students to pursue overseas education. From the SEM analysis, the personal attitude (*Personal*) factor appeared to be a strong motivation (high-regression weights) for students to choose a private HEI (0.923) in Malaysia (0.883) (see Table 4.23). This showed that personal factors had a significantly strong effect on respondents' considerations on both choices of selecting a study destination and institution. On the other hand, '*Home_Limit*' has a comparatively lesser influence on motivating their intention to study abroad (−0.301 and −0.292). The respective CR values of 6.605, 5.617, −3.669 and −3.626 (see Table 4.23) that were all greater than the critical value of ± 1.96 proved the significance of the push factors in the model. Thus, there was sufficient evidence to support hypotheses H1a, H1b, H2a, H2b (see Table 4.24). Limited accessibility to the home country's higher education system, along with personal attitudes, were significant push factors affecting international students' choice and decision-making regarding higher education at Malaysia's private HEIs. Once the students established their intention to study abroad, their decision on the choice of study destination and institution was influenced by pull factors.

Host country factors (*Host_Country*) and institutional factors (*Institutional*) attract (pull) international students to choose a particular study destination and institution. Pull factors are often associated with the attractiveness of the host country and institutional features

or attributes (Mazzarol & Soutar 2002; Wilkins et al., 2012). These pull factors made one country/institution appear to be more attractive than other contenders. The CR values of 3.240 and 6.847 (see Table 4.23) associated with the pull factors were above the statistically significant value of ± 1.96 . '*Host_Country*' was the higher order ranking factor and consisted of six other sub-factors that explained various host country characteristics. Together these sub-factors accounted for 60% variance of host country characteristics. '*Institutional*', on the other hand, consisted of five institutional-related first order factors. The five sub-factors were summed up to explain the 66% variance of institution characteristics (see Figure 4.31).

Summing up all the pull factors (*Host_Country* and *Institutional*), they explained the 68% variance of the international students' decision to study at private HEIs in Malaysia (see Figure 4.31). Institutional factors recorded a higher regression weight at 0.643 as compared to the host country factors at 0.249 (see Table 4.23). This indicated that institutional factors played a more significant role in affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs. In other words, it might be the institutional characteristics that attracted international students to study in Malaysia. More emphasis could have been placed on choosing a preferred institution than a study destination. The SEM results indicated sufficient evidence to support hypotheses H3 and H4 (see Table 4.24). Both host country factor and institutional factor are significant pull factors for attracting international students to choose a private HEI in Malaysia.

As discussed in Chapter 1, one of the key objectives of this study was to assess the satisfaction level of international students towards the decision that they made based on the key influencing factors. To achieve the goal, this study measured international students' experience in terms of their satisfaction (transaction-specific) towards the host country (*H_COUNTRY_SATIS*), and the institution they were attending (*HEI_SATIS*), as well as their social experience in general (*S_SOCIALEXP*). SEM results showed that institutional experience scored the highest satisfaction of respondents (regression weight of 0.960), followed by Malaysia as their host country for overseas study (0.881), and finally, respondents' social experience in Malaysia (0.723). The SEM results supported

hypotheses H5a, H5b and H5c, indicating a positive relationship between international students' study decision and their satisfaction towards Malaysia as a study destination, the private HEI they were attending, as well as their social experience in Malaysia. The study also investigated the relationship between the transaction-specific satisfaction and overall satisfaction to determine the proportion of variance in overall satisfaction being accounted for by the respective transaction-specific satisfaction. Forty-two per cent of the variance in international students' overall satisfaction was accounted by 'HCOUNTRY_SATIS' factors (satisfaction towards Malaysia as a study destination) (see Figure 4.31). Path analysis results evidently supported H6a and therefore confirmed a positive relationship between international students' satisfaction towards Malaysia as a study destination and their overall satisfaction.

4.3 Part C: Satisfaction and Willingness to Recommend

In order to investigate the relationship between respondents' satisfaction level and their future word of mouth behaviour in consumer referral, cross-tabulation analysis was used. The following sections were discussed on the cross-tabulation test results.

4.3.1 Overall Satisfaction Towards Malaysia as a Study Destination and Willingness to Recommend Malaysia to Others

Table 4.25 Results of the cross-tabulation analysis for international students' overall satisfaction towards Malaysia and willingness to recommend Malaysia to others

Overall satisfaction towards Malaysia and willingness to recommend Malaysia to others						
			Willingness to recommend			Total
			No	Neutral	Yes	
Overall satisfaction towards Malaysia	Dissatisfied	Count	14	10	21	45
		% within overall satisfaction towards Malaysia	31.1%	22.2%	46.7%	100.0%
		% of Total	3.2%	2.3%	4.8%	10.3%
	Neutral	Count	5	19	53	77

		% within overall satisfaction towards Malaysia	6.5%	24.7%	68.8%	100.0%
		% of Total	1.1%	4.4%	12.2%	17.7%
	Satisfied	Count	11	35	267	313
		% within overall satisfaction towards Malaysia	3.5%	11.2%	85.3%	100.0%
		% of Total	2.5%	8.0%	61.4%	72.0%
Total		Count	30	64	341	435
		% within overall satisfaction towards Malaysia	10.3	17.7	72.0	100.0%
		% of Total	6.9%	14.7%	78.4%	100.0%
Chi-Square Tests						
		Value	df	Asymptotic Significance (2-sided)		
Pearson Chi-Square		61.623 ^a	4	.000		
N of Valid Cases		435				

Note: 0.05 level of significance

Table 4.25 revealed the results of the respondents' intention to recommend Malaysia as a study destination to others based on their overall satisfaction level. A Pearson Chi-Square of p value 0.000 ($p < 0.05$) signified a positive relationship between international students' satisfaction and their willingness to speak positively about Malaysia to others. The data suggested that a satisfied customer tends to recommend Malaysia as a study destination to others. Based on the results, most of the respondents (341 respondents, 78.4%) were happy to recommend Malaysia as a study destination to others; whereas only a minority of them (30 respondents, 6.9%) on the contrary were not willing to do so. Meanwhile, out of the 313 respondents who were satisfied with Malaysia, 267 of them (85.3%) indicated a positive word of mouth (WOM) intention for Malaysia. Only a low percentage of 3.5% or 11 of the satisfied respondents were not enthusiastic to recommend

Malaysia to others. Fourteen out of the 45 dissatisfied respondents (31.1%) indicated they are unwilling to endorse Malaysia as a study destination, while 21 participants were surprisingly positive towards recommending Malaysia despite their negative study experience in the country. This finding is consistent with previous studies (Arambewela & Hall, 2003; Bianchi, 2013; Buddhichiwin, 2013; Chong, 2015) that suggested that the higher the satisfaction the more positive attitude of the international students tended to share and recommend their experience with others. On the contrary, the intention to recommend is reduced as satisfaction dropped.

4.3.2 Overall Satisfaction towards Current Private HEI and Willingness to Recommend the Institution to Others

Table 4.26 Results of the cross-tabulation analysis for international students' overall satisfaction towards the current private HEI and willingness to recommend the HEI to others.

Overall satisfaction towards HEI and willingness to recommend HEI to others						
		Willingness to recommend				Total
			Disagree	Neutral	Agree	
Overall satisfaction towards HEI	Dissatisfied	Count	20	10	11	41
		% within overall satisfaction towards Malaysia	48.8%	24.4%	26.8%	100.0%
		% of Total	4.6%	2.3%	2.5%	9.4%
	Neutral	Count	6	9	13	28
		% within overall satisfaction towards Malaysia	21.4%	32.1%	46.4%	100.0%
		% of Total	1.4%	2.1%	3.0%	6.4%
	Satisfied	Count	15	37	314	366
		% within overall satisfaction towards Malaysia	4.1%	10.1%	85.8%	100.0%

		% of Total	3.4%	8.5%	72.2%	84.1%
Total	Count		41	56	338	435
	% within overall satisfaction towards Malaysia		9.4%	6.4%	84.1%	100.0%
	% of Total		9.4%	12.9%	77.7%	100.0%
Chi-Square Tests						
		Value	df	Asymptotic Significance (2-sided)		
Pearson Chi-Square		117.409 ^a	4	.000		
N of Valid Cases		435				

Note: 0.05 level of significance

Cross-tabulation analysis procedure was also applied to explore the relationship between international students' satisfaction and their intention to recommend the institution to others (see Table 4.26). Pearson Chi-Square of p value 0.000 ($p < 0.05$) indicated a positive relationship between international students' satisfaction and their willingness to speak positively about the HEI to others. Results suggest that a satisfied customer tends to share and recommend their experience to others (Arambewela & Hall, 2003; Bianchi, 2013; Buddhichiwin, 2013; Chong, 2015). From Table 4.26, the majority of the respondents (338 respondents) were happy to recommend the institution they were attending to others; whereas only a small number of respondents (41 students) on the contrary were not willing to do so (77.7% versus 9.4%). Meanwhile, 314 out of the 366 respondents (85.8%) who were satisfied with their HEI indicated a positive WOM intention for the institution. Despite the high percentage of willingness, there were 15 satisfied respondents (4.1%) who refused to endorse their institution. The findings also revealed almost half of the dissatisfied respondents (20 out of the 41) or 48.8% of unhappy students declined to talk positively with others about the institution they were attending. The study affirmed that the higher the satisfaction, the more willing were the international students in recommending Malaysia and their HEI to others. Conversely, this willingness was reduced as satisfaction dropped. In conclusion, the test results revealed sufficient evidence in supporting hypotheses H7a and H7b (see Table 4.27). The

results confirmed that there is a positive relationship between international students' overall satisfaction and their willingness to recommend Malaysia as a study destination as well as their private HEI through word of mouth (WOM).

Table 4.27 Results of hypotheses testing for objective 3

Objective 3: To investigate the relationship between international students' satisfaction levels and their future word of mouth behaviour in consumer referrals.		
	Hypotheses	Supported (S)/ Not Supported (NS)
H7a	There is a positive relationship between international students' overall satisfaction and their willingness to recommend Malaysia as a study destination through word of mouth.	S
H7b	There is a positive relationship between international students' overall satisfaction and their willingness to recommend their private HEI to others through word of mouth.	S

4.4 Part D: Multi-group comparison

In this section multi-group comparisons were undertaken using the Mann Whitney U test and Kruskal-Wallis test to determine whether there were significant differences across gender and HEI types. Both analyses are non-parametric tests to compare two or more independent groups (Coakes et al., 2010). The Mann Whitney U test was employed to determine whether there were any significant differences in the perception of key pull factors (*Host_Country and Institutional*) between male and female international students in their choice of private HEI in Malaysia. Hypothesis testing was conducted on statistically significant pull factors (six '*Host_Country*' factors and five '*Institutional*' factors) causal paths that were identified in the structural model in Section 4.2.4. This study focused only on investigating the effects of key pull factors on gender because pull factors are often associated with the attractiveness of the host country and institutional features or attributes (Mazzarol & Soutar 2002; Wilkins et al., 2012). From the pull factors' perspective, understanding factors that appeal to students helps the host country (Malaysia) and its HEIs to craft a more strategic international recruitment strategy. And

on the contrary, understanding the push factors may be more beneficial to the home country government. The push factors reveal the reasons why students choose overseas education over home country education. Home country governments may thus work towards fixing the weak attributes of their country to improve their home market attractiveness and to reduce the outflow of local students (Ahmad & Buchanan, 2015). The study then employed the Mann Whitney U test to determine whether there were significant differences in the overall satisfaction of international students towards their decision whether to study overseas. In terms of differences across HEI types, the Kruskal-Wallis test was used to determine whether there are significant differences in perception of key pull factors according to the types of HEI students enrolled for their overseas education in Malaysia; and also the significant differences in the overall satisfaction of students studying at different types of HEI in Malaysia.

4.4.1 Gender

4.4.1.1 Gender comparison on key factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

The Mann Whitney test was used to test for differences in the key factors (six '*Host_Country*' factors and five '*Institutional*') influencing male and female students in their decision of their private HEI in Malaysia. The sample size of gender in this study is 262 males and 173 females. The Mann Whitney U test was carried out in SPSS version 24. Table 4.28 shows the results of the Mann Whitney U test in terms of the mean rank, sum of rank, Mann Whitney U test statistics and the *p* values for hypothesis testing. The results of multi-group comparisons were discussed in the following sections.

Table 4.28 Results of the analysis for differences between males and females across key factors influencing international students' decision on a country study destination and institution

Key factors influencing international students decision on a country study destination and institution	Gender				Mann Whitney U Test	Asymp. Sig (P value)
	Male (N = 262)		Female (N = 173)			
	Mean Rank	Sum of Rank	Mean Rank	Sum of Rank		

Host_Stability						
B3_13 Malaysia has low crime rate	229.83	60216.5	200.08	34613.5	19562.5	0.013*
B3_14 Malaysia has good law & order	228.02	59740.5	202.83	35089.5	34613.5	0.035*
Host_Image						
B3_2 Malaysia has a high quality of HE system	240.13	62913.5	184.49	31916.5	16865.5	0.000*
B3_3 Malaysia has world-class institutions	233.49	61175.0	194.54	33655.0	18604.0	0.001*
B3_4 Malaysia qualifications are highly & internationally recognised	230.86	60486.0	198.52	34344.0	19293.0	0.006*
Host_Migration						
B3_22 Malaysia allows international student to work whilst studying	213.25	55871.5	225.19	38958.5	21418.5	0.324
B3_23 Malaysia allows international student to stay back & work after graduation	214.84	56287.5	222.79	38542.5	21834.5	0.511
B3_24 Malaysia offers better chance for future migration	222.84	58383.0	210.68	36447.0	21396.0	0.313
Host_Visa						
B3_20 Malaysia has fast & easy visa processing system	220.6	57797.5	214.06	37032.5	21981.5	0.590

B3_21 Malaysia visa processing fee is affordable	220.91	57877.5	213.60	36952.5	21901.5	0.544
Host_Culture						
B3_7 Malaysia is a multiracial country	224.98	58944.0	207.43	35886.0	20835.0	0.125
B3_8 Malaysia is culturally diverse	225.36	59045.5	206.85	35784.5	20733.5	0.109
B3_10 Malaysia is religiously diverse	225.42	59059.5	206.77	35770.5	20719.5	0.112
Host_Attitude						
B3_5 Malaysia is a foreigner friendly country	221.31	57982.0	212.99	36848.0	21797.0	0.482
B3_6 Malaysia has low discrimination towards foreigners	221.18	57948.5	213.19	36881.5	21830.5	0.505

Hei_Recognition						
C3_2 It is internationally recognised	226.75	59409.5	204.74	35420.5	20369.5	0.062
C3_4 It has a high international education ranking	223.25	58492.5	210.04	36337.5	21286.5	0.267
C3_6 It has strong academic links & alliances with other HEIs	229.14	60033.5	201.14	34796.5	19745.5	0.019*
C3_7 It has strong industry links & alliances	225.45	59068.0	206.72	35762.0	20711.0	0.116
C3_8 It increases my employability upon graduation	221.55	58045.0	212.63	36785.0	21734.0	0.452
C3_9 It has high employment rate for its graduates	223.60	58584.0	209.51	36246.0	21195.0	0.238
Hei_Program						
C3_13 It uses English as the medium of teaching	213.98	56062.5	224.09	38767.5	21609.5	0.376
C3_14 It has a wide range of programs & courses offered	221.66	58074.5	212.46	36755.5	21704.5	0.423
C3_15 It has highly recognised programs & courses offered	220.92	57880.0	213.58	36950.0	21899.0	0.527
C3_16 It has the program/course I want	217.36	56948.5	218.97	37881.5	22495.5	0.889

Hei_Entry						
C3_20 It allows credit transfer for prior learning	219.08	57399.0	216.36	37431.0	22380.0	0.819
C3_21 It recognises my prior qualification	221.91	58139.5	212.36	36690.5	21639.5	0.408
C3_22 It has affordable & reasonable tuition fees	227.09	59498.0	204.23	35332.0	20281.0	0.055
Hei_Location						
C3_25 It has safe surroundings & neighbourhood	218.84	57335.0	216.73	37495.5	22444.0	0.859
C3_26 It is safe within the campus	217.54	56995.5	218.7	37834.5	22542.5	0.921
C3_27 It is located near to hospitals, shops, restaurants, transportation	217.42	56964.5	218.88	37865.5	22511.5	0.901
Hei_Facility						
C3_28 It has good & well maintained facilities & infrastructure	223.97	58680.0	208.96	36150.0	21099.0	0.206
C3_29 It has well equipped sports, leisure, recreation facilities	225.04	58960.5	207.34	35869.5	20818.5	0.139
C3_30 It has good student support services	222.34	58254.0	211.42	36576.0	21525.0	0.359

Note: 0.05 level of significance; * means *p* value is statistically significant at 0.05 level

Based on Table 4.28, the results revealed that only two factors: *Host_Stability* and *Host_Image* (both are host country related factors) out of the eleven factors that tested significant in terms of gender differences as all the p values of these constructs were less than 0.05. The results suggested that male respondents tend to pay more attention to host country political stability and safety, as well as host country image in their choice of where to study compared to the female respondents. The mean ranks for male respondents were comparatively higher than the female counterparts on both the constructs. The mean ranks for males on items in the '*Host_Stability*' factor (ranged from 228–230) were higher compared to the females (ranged from 200–203). Likewise the mean rank for male on items in '*Host_image*' factor (ranged from 234–240) were also higher compared to the females (ranged from 185–195).

None of the institutional factors in Table 4.28 indicated any significant differences in perception based on gender. Even though one of the six items (C3_6) of the '*Hei_Recognition*' construct indicated a significant difference between male and female respondents, the remaining five items on the contrary were not statistically significant. There was thus insufficient evidence to suggest that there was a difference in the perception of institution reputation and recognition between male and female international students.

In conclusion, the results in Table 4.28 showed only two (*Host_Stability* and *Host_Image*) out of the eleven factors were significant. There was not enough evidence to suggest gender differences regarding the remaining nine factors (*Host_Migration*, *Host_Visa*, *Host_Culture*, *Host_Attitude*, *Hei_Recognition*, *Hei_Program*, *Hei_Entry*, *Hei_Location*, and *Hei_Facility*). Hence there is insufficient evidence supporting hypotheses H8a and H8b (see Table 4.30). The study discovered no significant difference in the perception of key pull factors between male and female international students' decision-making in choosing a country study destination and institution.

Table 4.29 Results of hypotheses testing for objective 4 – H8a and H8b

Objective 4: To determine whether there are significant differences in the perception of key influencing factors on decision-making between male and female international students.

	Hypotheses	Supported (S)/ Not Supported (NS)
H8a	There is a significant difference in the perception of the host country factor between male and female international students' decision-making in choosing Malaysia as a study destination.	NS
H8b	There is a significant difference in the perception of the institutional factor between male and female international students' decision-making in choosing their private HEI in Malaysia.	NS

4.4.1.2 Gender comparison on overall satisfaction level of international students

The Mann Whitney U Test results in Table 4.30 showed that the male and female did not exhibit a significant difference in the overall satisfaction level. All items in 'OVERALL_SATIS' appeared not to be statistically significant with p values greater than 0.05. Hence there is insufficient evidence in supporting hypotheses H8c (see Table 4.31). In conclusion, there was not enough evidence to suggest differences between males and females in overall satisfaction.

Table 4.30 Results of the analysis for differences between males and females in overall satisfaction

Overall satisfaction of international students in choosing their private HEI	Gender				Mann Whitney U Test	Asymp. Sig (<i>P</i> value)
	Male (N = 262)		Female (N = 173)			
	Mean Rank	Sum of Rank	Mean Rank	Sum of Rank		
OVERALL_SATIS						

E1_2 The overall experience with Malaysia as a study destination exceeded my expectation	219.27	57448.0	216.08	37382.0	22331.0	0.789
E1_3 I'm very satisfied with my HEI	224.70	58872.5	207.85	35957.5	20906.5	0.149
E1_4 The overall experience with my HEI exceeded my expectation	214.35	56160.0	223.53	38670.0	21707.0	0.440
E1_6 The overall experience with my course at my HEI exceeded my expectation	217.38	56953.0	218.94	37877.0	22500.0	0.895

Note: 0.05 level of significance

Table 4.31 Result of hypotheses testing for objective 4 – H8c

Objective 4: To determine whether there are significant differences in the perception of key influencing factors on decision-making between male and female international students.

	Hypotheses	Supported (S)/ Not Supported (NS)
H8c	There is a significant difference in the overall satisfaction between male and female international students.	NS

4.4.2 HEI types

The Kruskal-Wallis test was then applied to test for differences in the key factors (six '*Host_Country*' factors and five '*Institutional*' factors) affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs across

the different HEI types. The comparison was carried out based on the respective sample size of each HEI type: 209 respondents from private universities, 65 respondents from university colleges, 97 respondents from foreign university branch campuses and, finally, 64 respondents from private colleges. Table 4.32 reported the Kruskal-Wallis test results in terms of the mean rank, sum of rank, and the p values for hypothesis testing.

4.4.2.1 HEI types of comparison on key factors affecting international student choice and decision-making regarding higher education at Malaysia's private HEIs

The following discussions were made based on the results of the Kruskal-Wallis test analysis that was used to determine whether there were significant differences in perception of key pull factors according to the types of HEI students enrolled in their overseas education in Malaysia; and also the significant differences in the overall satisfaction of students studying at different types of HEIs in Malaysia.

Table 4.32 Results of the analysis for differences in the perception of key pull factors influencing HEI choice of international students according to different HEI types

Key factors influencing HEI choice of international students according to different HEI types	HEI Types				Asymp. Sig (P value)
	Private University N = 209	University College N = 65	Foreign University Branch Campus N = 97	Private College N = 64	
	Mean Rank	Mean Rank	Mean Rank	Mean Rank	
Host_Stability					
B3_13 Malaysia has low crime rate	228.19	222.54	173.84	247.05	0.001*
B3_14 Malaysia has good law & order	220.44	235.72	181.43	247.43	0.003*

Host_Image					
B3_2 Malaysia has a high quality of HE system	227.12	216.35	188.20	235.06	0.037*
B3_3 Malaysia has world-class institutions	220.01	195.68	227.38	219.90	0.407
B3_4 Malaysia qualifications are highly & internationally recognised	227.42	194.68	210.91	221.69	0.248
Host_Migration					
B3_22 Malaysia allows international students to work whilst studying	249.20	204.22	173.43	197.67	0.000*
B3_23 Malaysia allows international student to stay back & work after graduation	249.56	160.78	186.91	220.17	0.000*
B3_24 Malaysia offers better chance for future migration	233.96	182.49	202.65	225.20	0.014*
Host_Visa					
B3_20 Malaysia has a fast & easy visa processing system	237.51	205.48	186.48	214.77	0.007*
B3_21 Malaysia's visa processing fee is affordable	224.85	185.03	198.11	259.24	0.002*
Host_Culture					

B3_7 Malaysia is a multiracial country	225.50	194.87	207.10	233.51	0.146
B3_8 Malaysia is culturally diverse	223.33	190.19	209.78	241.29	0.071
B3_10 Malaysia is religiously diverse	231.76	194.63	184.64	247.37	0.001*
Host_Attitude					
B3_5 Malaysia is a foreigner friendly country	229.05	152.31	223.89	239.72	0.000*
B3_6 Malaysia has low discrimination towards foreigners	238.65	158.78	218.16	210.45	0.000*

Hei_Recognition					
C3_2 It is internationally recognised	215.05	140.18	285.66	204.12	0.000*
C3_4 It has high international education ranking	205.40	156.05	302.45	194.08	0.000*
C3_6 It has strong academic links & alliances with other HEIs	215.91	141.08	279.19	210.20	0.000*
C3_7 It has strong industry links & alliances	218.48	130.04	275.16	219.14	0.000*
C3_8 It increases my employability upon graduation	210.89	166.20	283.28	194.88	0.000*
C3_9 It has a high employment rate for its graduates	219.32	141.27	278.21	200.35	0.000*

Hei_Program					
C3_13 It uses English as the medium of teaching	209.29	176.88	269.54	210.08	0.000*
C3_14 It has a wide range of programs & courses offered	221.21	178.03	234.32	223.38	0.021*
C3_15 It has highly recognised programs & courses offered	219.57	165.85	261.27	200.25	0.000*
C3_16 It has the program/course I want	210.12	186.34	255.25	219.42	0.001*
Hei_Entry					
C3_20 It allows credit transfer for prior learning	231.98	198.15	199.64	220.33	0.079
C3_21 It recognises my prior qualification	226.50	181.93	222.61	219.90	0.074
C3_22 It has affordable & reasonable tuition fees	236.34	211.63	175.81	228.53	0.001*
Hei_Location					
C3_25 It has safe surroundings & neighbourhood	217.00	206.22	225.05	222.55	0.787
C3_26 It is safe within the campus	222.18	194.55	224.16	218.84	0.380

C3_27 It is located near to hospitals, shops, restaurants, transportation	207.81	187.53	244.09	242.67	0.05
Hei_Facility					
C3_28 It has good & well maintained facilities & infrastructure	225.45	151.04	237.23	232.53	0.000*
C3_29 It has well equipped sports, leisure, recreation facilities	232.35	161.71	218.08	228.20	0.001*
C3_30 It has good student support services	226.17	158.95	232.65	229.07	0.000*

Note: 0.05 level of significance; * means p value is statistically significant at 0.05 level

Table 4.32 revealed that out of ten key factors influencing international students' decision, there were significant differences in the perception of seven factors according to types of HEI. Four statistically different factors were related to the host country – '*Host_Stability, Host_Migration, Host_Visa, Host_Attitude*'; while the other three were institution related – '*HEI_Recognition, HEI_Program and HEI_Facility*'. The differences in perception of these seven factors were found to be significant because the p values of each respective item in the constructs were less than 0.05. Based on the test results, international students attending foreign university branch campuses appeared to be least concerned about the host country's political stability and safety when deciding where to study; whereas international students studying at private colleges on the other hand seemed to be most particular about safety issues. The mean rank on '*Host_Stability*' for respondents at foreign university branch campuses ranged from 173–182, while the mean rank in the latter ranged from 247–248.

As for the remaining factors (*Host_Image*, *Host_Culture*, *Hei_Entry*, *Hei_Location*), the Kruskal-Wallis test results showed an inconclusive outcome. For example, only one measurement item (B3_2) out of three in the host country image appeared to be statistically significantly different for international students across the different HEI types. Hence there was insufficient evidence in supporting hypotheses H9a and H9b (see Table 4.33). In conclusion, the results revealed no significant differences on international students' decision-making according to the type of HEI (private university, foreign university branch campus, university college or private college).

Table 4.33 Results of hypotheses testing for objective 5 – H9a and H9b

Objective 5: To determine whether there are significant differences in the perception of key influencing factors on international students' decision-making according to the types of HEI (private university, foreign university branch campus, university college or private college).		
	Hypotheses	Supported (S)/ Not Supported (NS)
H9a	There is a significant difference in the perception of the host country factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing Malaysia as a study destination.	NS
H9b	There is a significant difference in the perception of the institutional factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing their private HEI in Malaysia.	NS

4.4.2.2 HEI types comparison on overall satisfaction level of international students using the Kruskal-Wallis Test

Table 4.34 revealed the Kruskal-Wallis Test results on the comparison of the overall satisfaction of international students according to the different types of HEIs. It can be

concluded that there were statistically significant differences in the overall satisfaction of international students from different HEIs as all items in the '*OVERALL_SATIS*' construct have p values smaller than 0.05. As recorded in Table 4.34, international students attending university colleges reported to be least satisfied with the lowest mean rank recorded across all items measuring overall satisfaction (ranged from 163–178). Respondents from private colleges recorded the highest satisfaction towards Malaysia as a host study destination, while on the other hand international students attending foreign university branch campuses appeared to be most satisfied with their institutions. The test results supported hypothesis H9c in confirming that there were significant differences in the overall satisfaction of international students from private universities, foreign university branch campuses, university colleges and private colleges in Malaysia (see Table 4.35).

Table 4.34 Results of the analysis for differences in overall satisfaction of international students according to different HEI types.

Overall satisfaction of international students' study experience	HEI Types				Asymp. Sig (P value)
	Private University N = 209	University College N = 65	Foreign University Branch Campus N = 97	Private College N = 64	
	Mean Rank	Mean Rank	Mean Rank	Mean Rank	
Satisfaction					
E1_2 The overall experience with Malaysia as a study destination exceeded my expectation	228.45	169.06	216.76	235.46	0.004*
E1_3 I'm very satisfied with my HEI	225.15	163.78	233.76	225.85	0.001*

E1_4 The overall experience with my HEI exceeded my expectation	224.88	177.52	227.60	221.10	0.035*
E1_6 The overall experience with the course at my HEI exceeded my expectation	229.34	171.42	222.34	221.68	0.009*

Note: 0.05 level of significance

Table 4.35 Results of hypotheses testing for objective 5 – H9c

Objective 5: To determine whether there are significant differences in the perception of key influencing factors on international students' decision-making according to the types of HEI (private university, foreign university branch campus, university college or private college).

	Hypotheses	Supported (S)/ Not Supported (NS)
H9c	There is a significant difference in the overall satisfaction of international students from private universities, foreign university branch campuses, university colleges and private colleges.	S

4.4.2.3 Summary of Multi-group Comparisons

Table 4.36 summarises the series of multi-group comparisons conducted across gender and HEI types. Detailed discussions with implications made based on these multi-group analyses will be presented in Chapter 5 (Section 5.1.3). Some key discoveries included:

4.4.2.3.1 Gender comparison

- There were significant differences between gender in their perceptions towards host country image and host country political stability and safety issues while deciding where to study.

- There was no significant difference between gender in the consideration of institutional characteristics while determining which institution to attend.
- Some areas of analyses were inconclusive due to the mixed results of p values within the construct. For instance, the difference between '*HEI_Recognition*' and gender, as well as the difference between the factors of '*Host_Image, Host_Culture, HEI_Entry*' on the different types of HEI. Not all items within those constructs appeared to be statistically significant differences.
- In general, the overall differences of key pull factors (host country and institutional factors) used by male and female respondents to choose a private HEI in Malaysia were minimal and thus concluded to be insignificant.
- The study also discovered no significant difference between gender in the overall satisfaction with their study experience in private HEIs in Malaysia.

4.4.2.3.2 HEI types comparison

- Some significant differences were noted in the host country and institution considerations used by international students across the different types of HEIs on deciding where to study and which institution to attend.
- When deciding where to study, international students from different types of HEIs exhibited different considerations on the host country's political stability and safety, host country migration and visa system, as well as the host country's attitude towards foreigners.
- When selecting which institution to attend, international students from different types of HEIs exhibited different considerations on institution recognition, institution program and course, as well as institution facilities and support systems.
- In terms of satisfaction level, there were significant differences in the overall satisfaction exhibited by international students across different types of private HEIs in Malaysia.

Table 4.36 Summary of all multi-group comparisons

	Gender	HEI Types
Key Pull Factors		

Host Country	Host_Stability	√	√
	Host_Image	√	—
	Host_Migration	x	√
	Host_Visa	x	√
	Host_Culture	x	—
	Host_Attitude	x	√
Institutional	HEI_Recognition	—	√
	HEI_Program	x	
	HEI_Entry	x	—
	HEI_Location	x	x
	HEI_Facility	x	√
Overall Satisfaction		x	√

Note: (—) inconclusive results; (x) No significant differences between groups;

(√) Significant differences between groups

4.5 Summary

Data analysis results and the outcomes of this thesis were presented in four parts (Parts A, B, C and D). The chapter began with a presentation on respondents' characteristics in Part A through descriptive analyses. Part B (four-step modelling process) reported all SEM test results that consisted of outcomes for exploratory factor analyses (EFA), one-factor congeneric models, measurement models, structural models and finally the hypothesis test results. EFA extracted 22 possible factors and all constructs were then tested with one-factor congeneric models to ensure the unidimensionality of each construct. Multi-factor (measurement) model analyses followed subsequently. All one-factor congeneric models were combined into 3 multi-factor models: push factors, pull factors and satisfaction related. The multi-factor models were then evaluated based on the measurement model validity before being put together into a structural model. The

structural model and hypotheses of the study were then tested through SEM. Hypothesis test results revealed that limited accessibility to the home country's higher education system and personal attitude factors were significant push factors that motivated respondents to leave their home country for overseas education. Meanwhile, SEM results also confirmed that 6 host country factors (host country image, host country attitude towards foreigners, host country political stability and safety, host country social and cultural diversity, host country visa processing and host country migration system) and 5 institutional factors (institution facilities and support, institution reputation and recognition, institution program and course, institution location, and institution ease of entry) to be statistically significant in attracting international students for selecting a private HEI in Malaysia. In terms of participants' study experience, hypothesis test results revealed a positive relationship between international students' study decision and their satisfaction towards Malaysia as a study destination, the private HEI they were attending, as well as their social experience in Malaysia. Results also confirmed a positive relationship between international students' satisfaction towards Malaysia as study destination and their overall satisfaction. Next, cross-tabulation results (Part C) suggested that the higher the satisfaction, the more positive attitude international students tend to share and recommend their higher education study experience in Malaysia with others. On the other hand, the willingness to recommend is reduced as satisfaction dropped. The last part of this chapter (Part D) focused on multi-group comparisons to test for gender effect, as well as differences between HEI types. The gender comparison results showed no difference across male and female respondents regarding their overseas study experience at Malaysia's private HEIs. On the other hand, HEI types' comparison indicated mixed results. Due to the inconclusive outcomes, there was insufficient evidence in supporting significant differences on international students' decision-making according to the type of HEI (private university, foreign university branch campus, university college or private college). Research findings, along with detailed discussions, will be presented in the following chapter.

CHAPTER 5 RESEARCH FINDINGS AND DISCUSSIONS

5.0 Introduction

While research findings were presented in Chapter 4, this chapter discusses the results by comparing the findings with previous studies and using these findings to gain further insights into the results in this study. Justifications are made based on the support of existing empirical studies whenever possible. Research findings of the study are presented in 3 sections. The first section began with a discussion of the findings of the study with regard to the demographic profile and characteristics of the respondents of the study in Section 5.1. The demographic characteristics of the sample were compared to the actual population to assess the representativeness of the sample whenever possible. Interpretations of the results continued in explaining international students' choice and their decision-making regarding higher education at Malaysia's private HEIs in section 5.2. The study discovered that personal factors in addition to limited accessibility to the home country's higher education system are the two main push causes for international students to seek for overseas education. A total of eleven influencing factors are found to be significant: six are host country related factors (host country image, host country attitude towards foreigners, host country political stability and safety, host country social and cultural diversity, host country visa processing and host country migration system) while the remaining five are institutional pull factors (institution facilities and support, institution reputation and recognition, institution program and course, institution location, and institution ease of entry). Section 5.3 focuses on discussing multi-group comparison test results. In this section, gender effects are first discussed with HEI types comparison following subsequently.

5.1 Respondents characteristics

The sample for this study was constituted from a random cluster sample of 435 full-time international undergraduate and postgraduate students who are currently enrolled in a private HEI in Klang Valley Malaysia. It is estimated that the total population for this study was approximately 130,000 students (Ministry of Higher Education, 2018b). The

study focused only within Klang Valley, an area that is centred in Kuala Lumpur and its adjoining cities and towns in the state of Selangor. Klang Valley is reported to have the highest number of private HEIs in Malaysia and together these institutions account for 72% of the total number of international student enrolments in Malaysia (Ministry of Higher Education, 2018b).

There were 262 males versus 173 female students who participated in this study (60.2% versus 39.8%) (see Table 4.2 in Chapter 4). This is in accordance with the Ministry of Higher Education's (2018b) record that there are more male international students than female (76.6% versus 23.4%) currently studying in Malaysia. Most of the respondents tend to be young adults aged between 18 and 25 years old with the majority of them in their bachelor degree or diploma courses. This is again consistent with the records of the Ministry of Higher Education (2018b) that the majority of international students in Malaysia were enrolled in undergraduate and diploma studies. About 87% of the interviewed students were financially funded by their parents. The household income statistics revealed that a big proportion of international students are not from the high-earning income group and with an annual household income less than US\$50,000. A likely reason why Malaysia is attractive to the lower to middle household income category is because of the comparatively lower overall cost (living cost and tuition fees) for studying in Malaysia in comparison to other popular study destinations (see Table 5.1).

Table 5.1 Cross-country comparison of the cost of education

Country (public/private HEIs)	Tuition Fees (per academic year)	Living Cost (per year)	Total Education Cost (per annum)
Australia (public)	US\$8,500	US\$8,500	US\$17,000
Canada (public)	US\$7,500	US\$9,000	US\$16,500
France (public)	Minimal	US\$13,000	US\$13,000
Malaysia (private)	US\$4,600	US\$4,000	US\$9,000
New Zealand (public)	US\$10,000	US\$11,500	US\$21,500
Singapore (private)	US\$6,500	US\$10,000	US\$16,500
United Kingdom (public)	US\$14,000	US\$12,000	US\$26,500

USA (public)	US\$13,000	US\$12,000	US\$25,000
USA (private)	US\$22,000	US\$13,000	US\$35,000

Source: Study Malaysia Online Handbook 9th Edition (2015)

The survey respondents in this study were of 59 different nationalities. The top 10 countries of origin were Bangladesh, Indonesia, Pakistan, Nigeria, Sri Lanka, China, Yemen, Saudi Arabia, Sudan, Egypt and India (see Table 4.3 in Chapter 4). This result closely matched the latest record by the Malaysian government as of March 2018 (Ministry of Higher Education, 2018b). Seven of the Top 10 countries identified in this study were identical to the government's record. According to the official data, Malaysia is currently hosting international students from more than 100 countries and the ten most active sources of international students to Malaysia are from Bangladesh, Nigeria, China, Indonesia, Pakistan, Yemen, Sudan, Iran, Libya and Kazakhstan (Ministry of Higher Education, 2018b). The sample in this study reflects the diversity in the population in terms of ethnicity, languages and cultural background. The Top 10 countries of origin could be clustered into Asia, Africa and Middle East regions. Almost half of the sample respondents (45.1%) were from Asia, or more precisely, South Asia was the largest exporter of international students to Malaysia (see Table 4.4 in Chapter 4). The 435 international students of this study were studying across a spectrum of different types of programs and courses in 29 HEIs (11 private universities, 8 university colleges, 3 foreign university branch campuses, and 7 private colleges). A larger proportion of respondents were attending private universities as compared to other HEI types (see Table 4.6 in Chapter 4). Similarly as reflected in the Malaysian government's database, close to half of the total international students (44.7%) are currently enrolled in private universities.

5.2 International students' choice of private HEIs in Malaysia

The research findings are discussed based on the pull and push factors that affect international students' choice and decision-making of higher education at Malaysia's private HEIs. It is important to note that the response of international students was made on a reflective basis in regard to how different influencing factors impact their decision-making. The argument for each of these factors is clarified through the testing of its hypothesis in the research model. The results are then compared with the findings from

prior studies pertaining to international students' choice and decision-making as summarised in Table 5.2.

Table 5.2 Hypothesis test results of key influencing factors of international students' choice of private HEI in Malaysia in comparison to prior research

Hypotheses	Overall result	Results of prior studies
H1a Limited accessibility to the home country's higher education system is a significant push factor for international students selecting Malaysia as a study destination.	Supported	Supported: McMahon (1992), Altbach (1998), Mazarrol and Soutar (2002), Altbach (2004), Maringe and Carter (2007), Bodycott (2009), Trahar (2014), Ahmad and Buchanan (2015), Lee (2015), Kaur (2016), Oliveira and Soares (2016)
H1b Limited accessibility to the home country's higher education system is a significant push factor for international students selecting a private HEI.	Supported	Supported: McMahon (1992), Altbach (1998), Mazarrol and Soutar (2002), Maringe and Carter (2007), Altbach (2004) Bodycott (2009), Trahar (2014), Ahmad and Buchanan (2015), Lee (2015), Kaur (2016), Oliveira and Soares (2016)
H2a Personal attitude factor is a significant push factor for international students selecting Malaysia as a study destination.	Supported	Supported: Mazarrol and Soutar (2002), Cubillo et al. (2006), Pyvis and Chapman, (2007), Llewellyn-Smith and McCabe (2008), Padlee

		et al. (2010), Lam et al. (2011), Wilkins et al. (2012), Chavan et al. (2014), Migin et al. (2015)
H2b Personal attitude factor is a significant push factor for international students selecting a private HEI.	Supported	Supported: Mazarrol and Soutar (2002), Cubillo et al. (2006), Pyvis and Chapman, (2007), Llewellyn-Smith and McCabe (2008), Padlee et al. (2010), Lam et al. (2011), Wilkins et al. (2012), Chavan et al. (2014), Migin et al. (2015)
H3 Host country factor is a significant pull factor for international students selecting a private HEI in Malaysia.	Supported	Supported: Verbik and Lasanowski, (2007), Bodycott (2009), Fernandez (2010), Findlay (2011), Morrish and Lee (2011), Bianchi (2013), Cheng et al. (2013), Rachaniotis et al. (2013), Hobsons (2014), Wu (2014), Lee (2015)
H4 Institutional factor is a significant pull factor for international students selecting a private HEI in Malaysia.	Supported	Supported: Mazzarol and Soutar (2002), Price et al. (2003), Yamamoto (2006), Briggs and Wilson (2007), Grebennikov and Skaines (2007), Hemsley-Brown and Goonawardana, (2007), Ismail et al. (2007), Reynold (2007), Verbik and

		Lasanowski (2007), Wachte and Friedhelm (2008), Yusof et al. (2008), Wagner and Fard (2009), Fernandez (2010), Padlee et al. (2010), Sia (2010), Baharun et al. (2011), Morrish and Lee, (2011), Koe and Saring (2012), Cheng et al. (2013), Insch and Sun (2013), Migin et al. (2015), Kaur (2016)
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5.2.1 Push Factors

This section examines the push factors (relevant hypotheses are H1a, H1b, H2a and H2b in Table 5.2) that initiate international students' motivation to study abroad. In line with Kotler and Fox (1995), the study discovered that motivation to study abroad was triggered by a variety of internal and external influences within their home country. Items that are significant in measuring a push factor are highlighted in the discussions below to provide insights into respondents' attitude towards the composites in the relevant construct. Together, these factors 'push' students' intention to leave their home country in pursuit of education abroad.

5.2.1.1 Limited Accessibility to the Home Country's Higher Education System

The study discovers that limited accessibility to the home country's higher education system is a push cause for students to leave their country of origin (Hypotheses H1a and H1b in table 5.2). This finding supports past studies on insufficient supply of education within a country may push students to seek higher education elsewhere (Mazarrol & Soutar, 2002; Maringe & Carter, 2007; Altbach, 2004; Bodycott, 2009; Trahar, 2014; Ahmad & Buchanan, 2015; Lee, 2015; Kaur, 2016; Oliveira & Soares, 2016). According to Mazzarol and Soutar (2002), an inadequate supply of higher education within the home country may reduce the choice of HEIs and hence limit the programs and course choices available to students. International students interviewed responded in accordance that

there was generally a lack of career opportunities, limited infrastructure and resources, as well as limited access to funding to accommodate all students in their native country. The lack of higher education opportunities in their home country led them to study elsewhere. Similar findings were also reported in Lee (2015) and Kaur (2016) studies that a lack of higher education capacity in the home country prompts the flow of migration to a host country to acquire the desired higher education opportunities.

5.2.1.2 Personal Attitudes

Personal attitudes too are identified as significant push factor initiate international students' intention to study abroad (Hypotheses H2a and H2b in table 5.2). The significance of personal attitudes factors in this study are contributed by: 1. Students' personal perceptions of the superiority of overseas education; 2. The endeavour for personal development.

5.2.1.2.1 Perceptions of the superiority of overseas education

Participants of this study perceived overseas education to be of better quality than qualifications from the home country. In fact, SEM results as reported in Section 4.2.4.1 of Chapter 4, revealed that this was the strongest motivation that 'pushes' the respondents of this research to study overseas. Similar claims were made by respondents in Wilkins et al. (2012) study and the authors indicated that this perception usually forms the students' earlier motivation to pursue an international education. Also agreed by Migin et al. (2015), the authors justified that students perceive overseas qualification as more superior because it creates competitive advantage for international students when they return to their home country. In particular, many believe that an overseas degree increases their competitiveness during job-hunting, which eventually sets them apart from candidates who have studied locally. The respondents of this study held similar opinions that foreign qualifications will make them more competent and secure them a higher salary in the future. Similar findings can also be found in past research by Cubillo et al. (2006) and Pyvis and Chapman (2007) in which the authors suggested that a foreign qualification is often valued more by future employers; it puts international students at an advantage that makes them more sought after in the job market and hence in a position to acquire a better job (Padlee et al., 2010).

5.2.1.2.2 Personal Development and Experience

In the context that studying abroad promotes personal development, the respondents of this study agreed that studying overseas allows them to meet new people and experience new cultures. Respondents believed that an overseas education would provide the experience that one could not obtain from within the home country. Living in a new country exposes international students to new experiences that they might not otherwise get in their home country, while at the same time promoting self-development. Several studies such as the ones by Pyvis and Chapman (2007), Lam et al. (2011) and Chavan et al. (2014) also noted international experience as an important motivation for students to choose a foreign education. Correspondingly, in research carried out by Llewellyn-Smith and McCabe (2008), the will to travel, have fun and the experience of living in a different country are the three main motivations to study abroad. Once the decision to study abroad was made, students chose and decided on a study destination, as well as their preferred institution. The considerations of host country and institution were affected by a combination of influencing factors (pull factors) that will be discussed in the following section.

5.2.2 Pull Factors

This study identified a plethora of pull factors (relevant hypotheses are H3 and H4 in Table 5.2) as influencing factors in attracting international students to choose a private HEI in Malaysia. These pull factors consisted of a series of host country factors and institutional factors that make Malaysia and the chosen HEI stand out from other competing countries and institutions.

5.2.2.1 Host Country Factors

The host country factor (hypothesis H3 in Table 5.2) is a higher order factor constituting six host country related factors: host country image, host country attitude towards foreigners, host country political stability and safety, host country social and cultural diversity, host country visa processing and host country migration system. The following sections explain how each of these country characteristics appeared to be attractive to international students and together they constituted a distinct profile of Malaysia as the

preferred choice of study destination. The discussions below were made based on SEM results as reported in Chapter 4.

5.2.2.1.1 Host Country Image

Country image typically refers to the reputation or the stereotype attached to a specific country (Al-Sulaiti & Baker, 1998) and popular study destinations like US, UK and Australia with high brand images and renowned reputations are more likely to be favoured by international students (Rachaniotis et al., 2013). Marketed as world-class institutions with high quality assurances that are internationally recognised, these countries manage to recruit more international students with their strong marketing techniques (Verbik & Lasanowski, 2007). The results of the SEM analysis identify country image as the most significant host country factor in attracting international students to Malaysia. International students choose Malaysia over other competing countries because of its popular image as a study destination. Respondents in the study perceived Malaysia as a country with world-class institutions that offer highly recognised and internationally recognised qualifications. This finding is in accordance with previous research that had also agreed on the effect of positive country image in attracting international students (Morrish & Lee, 2011; Wu, 2014). Likewise, Lee (2015) suggested that international students usually rely on their perceptions and emotional connections to a host country while evaluating an alternative, as it will be too costly or unrealistic for them to visit different host countries. This is particularly true when the service provider is in a foreign country and consumers are not able to detect the true quality of the service. Thus they may rely on country image to predict the quality prior to purchase or usage (Shapiro, 1982). Hence this study asserts that a positive country image may have a positive impact on influencing international students' choice and decision-making. Students tend to prefer a study destination that already has a good reputation and perceive the higher education offerings of that particular country to be of superior quality.

5.2.2.1.2 Host Country Attitude Towards Foreigners

Research findings in Chapter 4 (see Figure 4.31) revealed that the attitude of a country towards foreigners was a strong 'pull' that brought international students to Malaysia. Respondents of this study perceived Malaysia as a foreigner-friendly country and having

low discrimination towards foreigners. Similar finding was reported in Bianchi (2013) study that meeting new friends and being welcomed by the local community will make international students feel accepted and build up a sense of belonging. According to the author, it is normal for international students to feel lonely and homesick as they might not know anyone in the new and foreign setting. Bianchi (2013) also claimed that the faster international students could adjust themselves in a new country, the better they can perform in their studies. As students spend a significant amount of their academic life engaged in various activities in the host community, the feelings of not being discriminated against or not accepted by local people are becoming critical in shaping a positive overall study experience in the later stage. Having a positive and international friendly image with low discrimination is thus crucial to a host country. With the above justifications, this study advocates that host country attitude towards foreigner has positive influence on international students' choice of study destination. The more foreigner-friendly image Malaysians put forwards, the better study destination image it will portray.

5.2.2.1.3 Host Country Political Stability and Safety

The next significant factor identified in this study is host country political stability and safety. Political stability refers to the safety within a country. The SEM results (Figure 4.31 of Chapter 4) revealed that international students prefer Malaysia for its good law and order. Same finding is agreed by Morrish and Lee (2011) and according to the authors, countries that are safe with a low crime rate are generally more popular study destinations as these countries provide a more conducive environment for learning and for living in peace and harmony. Being ranked as the 28th most peaceful country, Malaysia is comparatively safe and politically stable, with a relatively low crime rate (Global Peace Index, 2015). A number of previous studies support this finding. According to Hobsons (2014), countries with appropriate safety legislation and stringent enforcement of laws tend to be the ideal study destination for international students. A study by Fernandez (2010) correspondingly suggested that Malaysia, which is free from most natural disasters and with attractive physical attributes, has also been value added. With consistent findings as prior research, it is thus a sound judgement to infer that host

country political stability and safety contributes positively in attracting international students to study in Malaysia.

5.2.2.1.4 Host Country Social and Cultural Diversity

Followed by the significance of political stability and safety construct, the research findings put forward social and cultural diversity as another significant pull factor drawing international students to study in Malaysia. International students in this research revealed that they are attracted to the multiracial characteristic and cultural diversity in Malaysia. This unique identity of Malaysia exposed international students to multicultural experiences, food and languages. Similarly, respondents in the Fernandez (2010) study labelled Malaysia an exciting place with social events and leisure activities. Cheng et al. (2013) in their study also agreed that countries that demonstrate a rich cultural, ethnic and religion diversity would be able to differentiate themselves in the education market. On the other hand, some researchers in the past have expanded their view to dwell on the effect of Malaysia being an Islamic country. Ahmad and Buchanan (2016), for instance, discovered that a country such as Malaysia has the benefit of being an Islamic nation in attracting international students from the Gulf and Middle Eastern region. Sharing the same religion background, these students were reported to experience minimal cultural differences. The authors also claimed that being an Islamic country does not make Malaysia less attractive to non-Muslim international students. Down (2009) prompted Malaysia policy makers to transform the country into a strategic hub for Islamic education as the Islamic status has drawn a significant number of students from Muslim countries. In regard to the effect of Malaysia being an Islamic country in attracting international students, this study did not identify significant evidence on how Islamic status add a bonus to Malaysia as a study destination. The study thus taking the stance by supporting Fernandez (2010), Cheng et al. (2013) and Ahmad and Buchanan (2016) studies that the more social and culturally diverse a country is, the more likely it will be preferred by international students.

5.2.2.1.5 Host Country Visa Processing

The next significant host country attribute identified in this study is related to the country visa system. Host country visa processing refers to visa-related matters. For instance, it

includes ease of visa application, the speed of visa processing and the fee incurred during the process. Participants of this study agreed that Malaysia has an easy visa application system and the application fee is affordable compared to other countries. As mentioned in the Study in Malaysia handbook published by Study Malaysia Online (2017a), Malaysia practises a simplified and hassle-free entry procedure to welcome international students. Malaysia recognises a study visa on arrival at the immigration checkpoint with the condition that the international student has valid travel documents. This includes a valid student pass, as well as an approval letter granted from the Malaysian Immigration Department. For a student pass, HEIs are responsible for applying for the student pass on the applicant's behalf (Study Malaysia Online, 2017a). A benefit of this over the conventional practice is that there is minimal interaction between the applicant and the authority involved and this may prevent ineffective communication that can occur due to the distance between two countries. It would be even more difficult if the applicant does not possess a strong command of the English language. Furthermore, Malaysia's study visa processing takes approximately seven to fourteen days – a much shorter time compared to some countries which might take up to months. The fee involved in visa application procedures is also minimal. The hassle-free process, along with the low fee structure, gives comparative advantage to Malaysia over other country study destinations (Study Malaysia Online, 2017a). Similar finding was also reported in Verbik and Lasanowski (2007) study that the ease of the visa application process along with an attractive visa fee structure are generally favourable to international students. In consistence to Verbik and Lasanowski (2007) study, this research infers that host country visa processing has a positive influence on international students' choice. The easier and hassle free it is to apply for study visa, the more likely Malaysia will be chosen as study destination.

5.2.2.1.6 Host Country Migration System

The last significant host country pull factor identified in this study is related to migration system. Research findings revealed that respondents chose to study in Malaysia due to visa flexibility that allows international students to work whilst studying. As stated in Study in Malaysia handbook, international students are allowed to work maximum 20 hours per week (with specific conditions applied) (Study Malaysia Online, 2017). In

addition to work whilst studying, policy relating to stay back and work upon completion of study has also been recognised as one of the attractions bringing international students to Malaysia. This finding supports previous studies on attractive migration framework has positive influence on attracting international students. Verbik and Lasanowski (2007) recognised that countries with attractive graduate visa schemes are more popular among international students. Australia, for instance, has a competitive advantage in developing a strong connection between study, work experience and employment to ensure skilled workers possess the specific skills that Australian employers value). On top of work flexibility during study, immigration scheme for permanent residency is another popular reason that makes one study destination more popular than another. The decision to study abroad with the ultimate intention of gaining a permanent residency visa is common for many international students. A survey undertaken by Australia's Monash University in 2006 revealed that 75% of Indian students who completed a university education in Australia in 2003, applied for and were granted permanent residency visas. Countries with greater migration flexibility upon graduation record a higher statistic on the inflow of international students (Verbik & Lasanowski, 2007; Bodycott, 2009; Findlay, 2011). Based on the above justification, the study supports that flexible and attractive migration framework has positive influence on international students' choice and decision-making. In fact, it is interesting to note that SEM results revealed a cause and effect relationship between the construct of visa processing and the host country migration system. The study thus proposes that the easier the visa processing topped with a better chance for future migration, the higher the chance that international students may choose to study in Malaysia.

5.2.2.2 Institutional Factors

International students' decisions to study at a specific private HEI in Malaysia were primarily influenced by five institutional factors (hypothesis H4 in Table 5.2) which were institution facilities and support, institution reputation and recognition, institution program and course, institution location, and institution ease of entry. The discussions below revealed how these factors play a significant role in international students' selection of a particular institution, course and program in comparison with prior studies.

5.2.2.2.1 Institution Facilities and Support

SEM results (see Figure 4.31) revealed that institution facilities and support have the strongest influence on international students' choice of institution. An institution's facilities indicate the availability and accessibility of various sports, leisure and recreation facilities. More specifically, campus facilities may include clubs and societies, sports and recreation centres, libraries, labs and other entertainment features. Respondents of this study revealed that having well equipped sports, leisure and recreation facilities were an important selection criterion for choosing an institution. Similarly many previous studies (Mazzarol & Soutar, 2002; Price et al., 2003; Yamamoto, 2006; Wagner & Fard, 2009; Fernandez, 2010; Padlee et al., 2010; Baharun et al., 2011; Cheng et al., 2013; Migin et al., 2015) also substantiated the significance of campus facilities in attracting international students. In a study by Fernandez (2010), the availability of campus facilities was found to be extremely important in ensuring that the campus environment is conducive to learning. Similar findings were also reported in past studies by Price et al. (2003) conducted in the UK; Yamamoto (2006) conducted in Turkey; and Wagner and Fard (2009) conducted in Malaysia. Meanwhile, according to Malaysian Ambassador Ahmad Jazri bin Mohammed Johar, the high standards and excellent facilities in Malaysian universities have been a major attraction for foreign students to study in Malaysia (Rivera, 2013). This is again in consensus with the findings of the study. On the other hand, Reynold (2007) discovered a tendency for students to reject an institution when important facilities were missing, inadequate or poorly maintained.

The significance of institution facilities and support construct in this study also looks into the provision of international students' support systems. Support services here include both general and learning supports that are offered to international students. The support takes account of the institution's efforts in taking care of the welfare of international students. It is interesting to highlight that SEM results (see Figure 4.31) identified institution facilities and support as the most significant factor in affecting international students' choice of an HEI. Even though past studies (Mazzarol & Soutar, 2002; Price et al., 2003; Yamamoto, 2006; Wagner & Fard, 2009; Fernandez, 2010; Padlee et al., 2010; Baharun et al., 2011; Cheng et al., 2013; Migin et al., 2015) have considered campus facilities as a criterion in students' choice, this factor is typically not the key consideration

in international students' decision-making. The possible justification that institution facilities and support appeared to be the most dominant factor in this study will be unlike previous studies that solely emphasise the availability of facilities and infrastructure, the significance of this construct also encompasses the provision of support services. While good student support system does not typically appear in students' choice and decision-making studies; this factor is common in students' satisfaction literature (Arambewela & Hall, 2003; Khan, 2012; Bianchi, 2013; de Jager & Gbadamosi, 2013; Chavan et al., 2014; Padlee & Reimers, 2015). The study thus postulates that the availability of campus facilities, along with good international student support services, as the key influencing factor for affecting international students' choice of institution.

5.2.2.2.2 Institution Reputation and Recognition

The second most important criterion is related to institution reputation and recognition. This finding is consistent with the majority of existing literature (Mazzarol & Soutar, 2002; Cubilo et al., 2006; Ancheh et al., 2007; Meringe & Carter, 2007; Pyvis & Chapman, 2007; Fernandez, 2010; Americanos, 2011; Chia, 2011; Lim et al., 2011; Koe & Saring, 2012; Wilkins et al., 2012; Cheng et al., 2013; Khairani & Razak, 2013; Kusamawati, 2013; Singh et al., 2014; Wu, 2014; Ahmad & Buchanan, 2015; Migin et al., 2015; Winter et al., 2015; Kaur, 2016; Oliveira & Soares, 2016). Institution reputation and recognition is for sure among the most agreed upon universal influencing factors on international students' choice of HEI. Despite the popularity of this construct in existing empirical studies, there is a lack of consensus on what precisely the construct measures. Institution reputation has been loosely regarded as the prestige of the institution, its international and national ranking, recognition from future employers, both industry and academic links and alliances, and years of academic experience. Understanding that there is no one standardised measure to quantify what constitutes institution reputation and recognition, this study takes a broader breadth to include an institution's brand image, institution ranking, strategic links and alliances, as well as the employability aspect upon graduation to measure reputation and recognition.

Based on the research findings, the respondents of this study revealed that it is essential to choose an HEI that is internationally recognised. Past studies by Migin et al. (2015),

Belanger et al. (2002), Mazzarol and Soutar (2012), Morrish and Lee (2011) also agreed on the importance of institutions to be highly and internationally recognised in attracting international students. As suggested by Migin et al. (2015), high recognition of an HEI increases the institution's brand name that helps to create awareness of the university and the programs offered. Studies in the past regarded brand image as an indicator of education quality (Palacio et al., 2002); international students utilise the institution's brand name to validate the value of the degree they receive later (Shapiro, 1982). According to Belanger et al. (2002) and Mazzarol and Soutar (2002), institutions with strong brand images typically enjoy a superior market position, enabling the university to regard itself as a top, leading or world-class university.

Similarly when it comes to institution ranking, respondents of this study also regarded international education institution ranking as an important benchmark when it comes to selecting their desired institution. Consistent finding is reported in Morrish and Lee (2011) study that a qualification from a high-ranking university is more valuable and will facilitate a better path to finding a job after graduation. In addition, research findings also revealed that it is equally vital for an HEI to have strong academic and/or industry links and alliances with various parties. Padlee et al. (2010), Sia (2010), Koe and Saring (2012), Hobsons (2014) share similar findings on the importance of this item. In particular, Migin et al. (2015) and Kaur, (2016) agree that the strategic collaborations not only signify the recognition an institution has gained in both academic and industry fields, but at the same time may increase employability of international students upon graduation. Similarly, employability appeared as an important decision factor in Mazzarol et al. (2001) study and for Briggs and Wilson (2007), it was the third most-valued factor. These studies suggested that institutions that have recorded high employment rates for their graduates are preferred by international students. In accordance with the findings of these research, participants of this study rated graduates' employment prospects more important than institution ranking when it comes to choosing a private HEI. Migin et al. (2015) on the other hand pointed out that an overseas qualification that is recognised by future employers may have a value added factor in international decision-making as many employers tend to judge the validity of the prospective candidate's qualification.

Based on the above justifications, the study infers that institution reputation and recognition are essential institutional attributes to attract international students. Specifically, a private HEI that is internationally recognised and ranked as well as having strong academic and/or industry links and alliances is more likely to be chosen.

5.2.2.2.3 Institution Program and Course

Institution program and course came third as an influencing factor in this study. This construct features multiple dimensions of programs and courses, such as the quality aspect, availability and variety, as well as the medium of instruction. Arguably this construct can be viewed as an extension of institution reputation and recognition as it also looks into the recognition aspect of the programs and courses delivered by an institution. Research findings (see Figure 4.31) revealed that the provisioning of highly recognised programs and courses has been rated as most important aspect of institution offerings by the respondents of this study. Similar finding has also been reported in studies by Hemsley-Brown and Goonawardana (2007) and Migin et al. (2015). Hemsley-Brown and Goonawardana, (2007) revealed that in some cases, it is possible for some faculties to develop a more recognised image than the university itself through the programs and courses delivered. In terms of the availability of programs/courses, respondents typically place a higher interest on the HEI that provides a wide range of selections. International students in particular prefer institutions that offer programs/courses in the area related to their academic interest, especially when the desired program is not available in their respective home country. Meanwhile, Migin et al. (2015) discovered that students are more willing to venture to an internationally recognised program overseas when the qualification is also recognised in their home country.

In addition, the use of English as the medium of teaching has also contributed to the significance of institution program and course factor in this study. This finding supports Verbik and Lasanowski (2007) study in which the authors suggested that the adoption of English as the medium of teaching allows Malaysia to substantially widen its recruitment pool to compete on more equal terms with other English-speaking study destinations. According to a study conducted by Wachte and Friedhelm (2008) on the European market, the authors recorded the number of English-taught courses at European

universities has tripled in the past five years. Given the rapid growth in demand for English language provision, many institutions in non English-speaking countries begin to introduce English as the medium of instruction in their programs. The major motivation behind such a change was to attract foreign students, as adopting a universal language eliminates the language barrier and promotes language commonality (Verbik & Lasonowski, 2007). With apparent supports from previous literature, this study upholds that institutions' program and course is a influencing factor that affects the HEI selection of international students.

5.2.2.2.4 Institution Location

The next factor that appeared to be significantly influenced international students' choice of HEI is institution location. This construct often denotes the distance between the HEI and the student's accommodation; the shorter the distance the students are required to travel, the more likely they are to choose the HEI (Shanka et al., 2006; Briggs & Wilson, 2007; Lam et al., 2011). Not all studies agreed on the distance of the institution as a selection criterion in international students' choice of HEI. For instance, Migin et al. (2015) discovered the accessibility of public transportation, such as railway station, bus station, and airport turned out to offer more attractive incentives than the distance of the institution from students' accommodation or the availability of private accommodation nearby the institution. Similarly Insch and Sun (2013) uphold the importance of public transportation in enabling students to take part in various activities outside the main campus area. Based on the SEM results, this study upholds Migin et al. (2015) findings that the significance of institution location is based on close proximity to public amenities, such as hospitals, shops, restaurants, transportation, rather than the travel distance between campus and accommodation. Two justifications advanced for this decision are: 1) similarity in the research context as both studies were conducted with international students in Malaysia; 2) the sample of this study was collected from institutions located within the Klang Valley Malaysia, where most of the HEIs are conveniently situated close to public transportation. This study asserts that being able to travel or move around conveniently is important to some international students, especially when they are relying on public transportation. Similar results have also been reported in the Hemsley-Brown and Oplatka (2015) study.

On the other hand, the construct of institution location in this study was also attributed to the safety aspect, in particular, safety within campus and the nearby community. Previous studies by Mazzarol and Soutar (2002), Padlee et al. (2010), Baharun et al. (2011), Cheng et al. (2013) also cited safety as an important surrounding attribute in their research. Other surrounding traits mentioned in these studies included the availability of medical services, part-time jobs and social networking opportunities. The study thus postulates that, the more convenient location a private HEI is situated, the higher chances it will be preferred by international students.

5.2.2.2.5 Ease of Entry Requirement

The final institutional factor that was found significant in this study was the degree of flexibility and the ease of entry requirement. This includes the willingness to recognise students' prior qualifications and the ease of credit transfer by an institution. The ease of entry requirement is supported in the studies by (Ismail et al., 2007; Yusof et al., 2008; Padlee et al., 2010; Sia, 2010; Baharun et al., 2011; Cheng et al., 2013) as a fragment of the programs and courses aspect. The finding from this study, however, suggests the ease of entry as an independent deciding factor of international students' when selecting a private HEI in Malaysia. It can be presumed that the less hassle a student has to go through to enrol in an institution i.e. the more straightforward the application process, the more likely the students will choose the institution. Similar finding has been reported in Cheng et al. (2013) study that the ease of admission into an institution had contributed as the selection criteria of their respondents. Half of the participants in their study confirmed that their selection of a Malaysian institution was based on mutual recognition of qualifications and credit transfer arrangements. This study thus articulates the ease of institution entry requirements as one of the key influencing factors of international students in choosing a private HEI in Malaysia.

5.2.3 Information Source and Third Party Influence

This section discusses the effect of the information source and third party in international students' choice and decision-making. Table 4.10 in Chapter 4 reported that a high percentage of respondents indicated they had obtained sufficient information and were familiar with Malaysia before deciding to study there. Similarly the majority of

international students exhibited a high level of awareness with the institution as well as the program prior to their choice. These findings are in accordance with the study by Mazzarol and Soutar (2002) that the available information on the destination country is a relevant factor in students' decision-making. Oliveira and Soares (2016) suggested that in addition to obtaining sufficient information, how easy it is for a student to assess relevant information also impacts on their choices and decisions made later. The study thus elucidates that the respondents' level of awareness towards a host country and/or a particular institution has a profound impact on the choices made.

This study identified that international students typically made three decisions: the decision to study overseas, choice of country destination and, finally, choice of institution and program. Descriptive statistics in Section 4.1.4 articulated that decisions made in most cases were self-motivated. For instance, almost half of the respondents indicated that it was their own decision to study abroad, and it was them that chose to study in Malaysia and chose the current institution (see Table 4.8). Even though the international decision-making was found to be mainly self-motivated, it seemed that international students might not be the sole decision makers due to the complex nature of the decisions and choices involved. In support of this, research findings revealed that decision-making also involved their parents and others. While the influence of parents was found to be profound in the decision-making, international students' choices may be subjected to the influence of others. Studies by Mazzarol & Soutar (2002), Pimpa (2003), Padlee et al. (2010), Morrish & Lee, (2011) found strong evidence of the influence of various external parties on the role of information sharing and/or providing personal recommendations in regard to students' overseas education. To understand the role of third parties in decision-making, the following sections discuss the importance of parents, relatives, friends, institution representatives, education agents and online searches as information sources. The study discovers that international students had made their considerations based on recommendations from these third parties. Discussions and implications are made based on the test results reported in an earlier chapter (Section 4.15) in comparison with previous studies.

5.2.3.1 Parents

This study discovers that parents played multiple roles in international students' decision-making regarding studying abroad. First and foremost, parents were the main financial providers funding most of the respondents' overseas education (see Table 4.2). Previous studies also agreed on the parents' role in sponsoring students' overseas education (Pimpa, 2004; Lee, 2015). Pimpa (2004), for instance, had extensively explored the role of the family and, in particular, parents influence on students' decision-making. Financial support (tuition fees, cost of living and other expenses), for instance, had been quoted as one of the most dominant roles parents played. According to the author, financial support may either limit or expand the scope of country choices. Likewise, the Lee (2015) study on Malaysian students studying in UK similarly agreed that parents played a functional role in financing their child's education abroad.

On top of being the main financial provider, research findings also suggested that the choices and decisions international students made in regard to their higher education in Malaysia could be under the influence of parents. Some respondents revealed that the decision to study abroad was made by their parents. This finding is agreed by other researchers that parents often play a role in helping students decide for their future (Pimpa, 2004; Sullivan, 2006; Sojkin et al., 2012). Pimpa (2004), for instance, discovered that parents' influence was the strongest in shaping Thai students' motivation to study abroad. The author believed that Thai students' decision-making might be inspired and/or pressured by family expectations and their choice of overseas education was an attempt to fulfil the parents' expectations. Sojkin et al. (2012), in their research undertaken in Poland, also discovered that parents' influence was more apparent in generic decisions (such as decision to study overseas), while specific choices (choice of institution and/or course) were most of the time made by an individual. In accordance with these studies, Chapter 4 (see Table 4.8) showed that parents of respondents in this study not only motivated the latter's intention to study abroad, parents in many cases also affected students' choices of 'where' and 'what' to study. In other cases, when the decisions were not made by the parents or the respondents themselves, the choices were a joint family decision. Some respondents revealed that it was the parents' decision to study in Malaysia and the choice of current HEI was also under the parents' influence. Similarly in a cross

country study by Mazzarol and Soutar (2002), the authors discovered that parental influence was apparent among international students from Taiwan and Indonesia. In fact, parental influence was stronger than education agent, especially when choosing the country destination. Some researchers on the contrary had an opposite view on the influence of parents. Koe and Saring (2013) had identified no significant relationship between family influence and the intention to study at graduate school. The authors justified this, as the students were mostly adults, they made the decisions themselves. Thus they suggested that HEI operators not be over-promoting the institution to the parents. Ismail et al. (2007) also reported that parents had the least influence on students' choice.

Despite the mixed opinions on parental influence, this study supports previous studies (Mazzarol & Soutar, 2002; Pimpa, 2004; O'Brien et al., 2007; Sojkin et al., 2012; Lee, 2015), and agrees that the role of parents was solid. This study substantiates that parents played multiple roles in influencing international students' choice and decision-making of higher education at Malaysia's private HEIs. 1) First and foremost, parents were the primary financial provider with a high percentage of respondents' overseas education fully funded by parents; 2) The majority of parents had expected their child to obtain a foreign qualification and they subsequently played a role in deciding where and what to study; 3) Respondents had also rated their parents as an important information source. This finding supports Pimpa (2004) study on Thai students' decision-making on the different types of influence from parents. Similarly the author also discovered that the parents' influence was strong in aspects such as those concerning finances, expectations and information. O'Brien et al. (2007), in accordance, also advocated the role of the family in many stages of the decision-making for graduate studies.

5.2.3.2 Internet Search

The next most important information source respondents referred to was the internet. A high majority of the respondents agreed that online searching was important for gaining information about the country, the institution, as well as course and program information that they intend to study (see Table 4.11). The rationale could be due to 93.6% of the respondents in this study were young adults between the ages of 18 and 30 years (see

Table 4.2). These young adults are typically referred to as the Y generation who are born in the digital era, a generation that lives and grows up under the influence of the internet and, in particular, social media such as Facebook, Twitter and Instagram (Twenge & Campbell, 2008). The familiarity and reliance on internet platforms provide students with multiple sources to search for information according to Sojkin et al., 2012. The authors reported that the internet (university website, online forums and opinions) was the most frequently used information source for the respondents in their study. Similarly Cheng et al. (2013) also reported that students used the internet to find out more about the institution they are interested in. With consistent finding as previous research by Sojkin et al., (2012) and Cheng et al. (2013), this study advocates the internet as an important tool international students used in particular for information search.

5.2.3.3 Recommendation From Others

Respondents of this study also revealed that it was recommendations from others to study in a private HEI in Malaysia and that this might include both personal (relatives and friends) and/or professional recommendations (education agent and HEI representatives) (see Table 4.11). After parents and internet searches, participants rated relatives as the next most important information source, followed by education agents, friends and institution representatives, with the importance of the last three information sources being rated comparably close to one another.

The influence of recommendation from others has been agreed upon in existing literatures (Mazzarol & Soutar, 2002; Pimpa, 2003; UKCOSA, 2006; Cheng et al., 2013; Singh et al., 2014) on international students' choice and decision-making. In Mazzarol and Soutar (2002) study, the authors agreed that in addition to parental influence, personal recommendations from relatives, friends and other influencers might also impact on students' choice of host country. The authors suggested that the influence was particularly strong especially when there is family or friends living in the destination country and/or when family and friends have studied there previously. In a survey jointly collaborated by The Council of International Education (UKCOSA) and British Council in the UK, the choice of institution was most frequently driven by personal recommendations (UKCOSA, 2006). Similarly Cheng et al. (2013) also agreed that recommendations by

friends and relatives are the most predominant source of information and persuasion in particular on the choice of institution. Agreeing on peers' influence, Singh et al. (2014) supported that friends' recommendations to be crucial in the choice of study destination. On a similar note, Pimpa (2003) also agreed that peers and agents as the most important non-familial sources of influence. According to the author, while friends tend to provide general information, education agents on the other hand deliver more in-depth and academic-related information. Education agents usually provide extensive assistance to prospective students: from academic-related advice (pertaining to university, programs and courses) to non-academic arrangements on travel and accommodation (Pimpa, 2003). Similar to the role of education agent, institution representatives also provide professional advice in helping prospective students choose a suitable course.

In view of the above, the study takes a similar notion in supporting the above studies that relatives, friends, education agents and institution representatives are important information source in affecting choices made by international students for overseas education. The recommendations (both personal and professional) by these influencers is prevalent in the choice of study destination, institution and/or program and course.

5.2.4 International Students' Satisfaction

Students' satisfaction in this study was measured through a combination of judgements (transaction-specific satisfaction) respondents made based on their choice of Malaysia as their study destination, their choice of private HEI, and their social experience in Malaysia. The following discussions were made based on hypothesis test results in comparison to previous studies as summarised in Table 5.3.

Table 5.3: Hypothesis test results of international students' study decision and satisfaction in comparison to prior research

Hypotheses	Overall result	Results of prior studies
H5a There is a positive relationship between international students' study decision and their satisfaction towards Malaysia as a study destination.	Supported	Supported: Insch and Florek (2008), Insch (2011), Bianchi (2013), Insch and Sun (2013)

H5b There is a positive relationship between international students' study decision and their satisfaction towards their private HEI.	Supported	Supported: Joseph and Joseph (1997), Li (2005), Banwet and Datta (2003), Gordon (2005), Kuo and Ye (2009), Khan (2012), Zhao (2012), Arambewela and Hall (2003), Bianchi (2013), Insch and Sun (2013), Chavan et al. (2014), Memon et al. (2014), Finn and Darmody (2015), Padlee and Reimers (2015)
H5c There is a positive relationship between international students' study decision and their satisfaction towards their social experience in Malaysia.	Supported	Supported: Pyvis and Chapman (2007), Sam (2009), Sojkin et al. (2012), Bianchi (2013), Chavan et al. (2014), Memon et al. (2014), Finn and Darmody (2016)
H5d There is a positive relationship between international students' study decision and their overall satisfaction.	Not supported	No prior studies

5.2.4.1 Satisfaction towards Current Private HEI

The findings revealed that students were generally satisfied with various aspects of service quality within the private HEIs in Malaysia (hypothesis H5b in table 5.3). The service aspects that were found significant in the study included institution reputation and recognition, supportive learning environment as well as institution location and a safe environment. In line with this finding are past studies by Joseph and Joseph (1997), Li (2005), Banwet and Datta (2003), Gordon (2005), Kuo and Ye (2009), Khan (2012), Zhao (2012), Arambewela and Hall (2003), Bianchi (2013), Insch and Sun (2013), Chavan et

al. (2014), Memon et al. (2014), Finn and Darmody (2015), Padlee and Reimers (2015). All below justifications were made in comparison to these studies.

5.2.4.1.1 Positive Institutional Image

Respondents identified that they were most satisfied with the overall image of the institution, especially the reputation, recognition and ranking associated with the private HEI they study at. This result is in accordance to studies conducted by (Joseph and Joseph, 1997; Lee, 2005; Kuo and Ye, 2009; Memon et al., 2014; Zhao, 2012). It was no surprise that respondents valued institution image as the most crucial quality anchor of the higher education received. Joseph and Joseph (1997), in their research into the perception of the service quality of higher education among 616 New Zealand students, also discovered that New Zealand students viewed academic reputation as the most important factor in terms of service quality. Likewise, according to Li (2005), an institution's image and learning quality significantly affected the satisfaction of students among the postgraduate business school students in the US and UK. Kuo and Ye (2009) study also supported this finding and the authors identified student satisfaction as having a strong relationship with the quality of higher education and institution image perceived by the students. According to Memon et al. (2014), students are more likely to feel proud and secure in their future careers when they receive high quality education from a renowned institution, while Zhao (2012) asserted that satisfied students tend to perform better academically. In line with the above findings, this study proposes that positive institution image, in particular institutions with a good reputation, high recognition and top ranking positively affect international students' satisfaction towards the institution they enrolled at.

5.2.4.1.2 Supportive Learning Environment

The next institutional service dimension that earned high satisfaction from the respondents was the supportive learning environment of their HEIs (see Table 4.24). More specifically, respondents of this study have exhibited high contentment with the efforts of the institutions in taking care of international students' welfare. These efforts more precisely refer to the general as well as learning supports provided by the institutions. There is strong evidence in existing literatures that supports a good learning environment positively and significantly affects students' satisfaction (Banwet & Datta,

2003; Khan, 2012; Bianchi, 2013; Padlee & Reimers, 2015). Despite the same opinion, the discussions on learning environment however span a wide breadth of topics and there is no exact measurement in defining a positive learning environment. For instance, the Banwet and Datta (2003) discussion on institution environment focused comprehensively on the physical evidence of the institution environment in promoting students' satisfaction. Physical attributes that have been regarded as important include clean and tidy surroundings, adequate infrastructure, adequate class size, efficient processes and systems, facilities for self-study, adequate learning resources, teaching materials and classroom services. Unlike this study that advocates on supportive learning environment, the authors argued that these physical dimensions significantly contribute to a conducive learning environment.

Khan (2012) on the other hand suggested that it was caring and responsive support from teaching and administrative staff that formed a conducive learning environment. The author discovered that constant support from academic and non-academic staffs improved students' academic performance, as well as achieved better learning outcomes. Parallel to this was the Bianchi (2013) study that advocated motivation, helpfulness, and supportiveness of the staff as more relevant in creating positive satisfaction. According to these studies, care and responsiveness are vital in nurturing and developing intellectual and sociocultural dimensions of students. Sharing of students' concerns and rendering appropriate advice is helpful in improving students' performance and satisfaction. Padlee and Reimers (2015), in contrast, identified physical evidence of the institution as having no influence on students' overall satisfaction. Despite the discrepancy of the effect of learning environment on students' satisfaction, the study agrees with Khan (2012) and Bianchi (2013) and postulates that a positive learning environment promotes a satisfactory study experience. To be more exact, international students' satisfaction towards the learning environment is explicitly driven by human factors, such as helpfulness and supportiveness of the staff (academic and non-academic).

5.2.4.1.3 Safety and Convenient Location

The third institutional service dimension that was found significant was the safety and convenient location of their HEI (see Table 4.23). Participants were generally satisfied

and felt safe around the surrounding environment and were content with the convenient access to public transport. The best justification to assume the high contentment of respondents towards the location of their institutions was perhaps the strategic location of all participating institutions in Klang Valley Malaysia, a prime area where there is easy accessibility to public transport and other public amenities (Study Malaysia Online, 2017). Similar findings were reported in studies by Arambewela and Hall (2003), Insch and Sun (2013), Chavan et al. (2014). In Arambewela and Hall (2003) study, the authors agreed that as international students spend most of their time in host communities, their experience with the community environment could have a greater influence on their satisfaction than the internal environment of the institution. Insch and Sun (2013) specifically highlighted that public transport might act as a facilitator for social interaction and experiences enabling students to take part in various activities outside the main campus area. Students living outside the campus accommodation might also rely on public transport to take part in extra-curricular activities on campus. Likewise, Chavan et al. (2014) in their studies also suggested that convenient access to public transport and car parks, well-priced local facilities, such as food halls, post offices and banking services were among some external features that affect students' perceptions of service quality. Supported by these past research, the study puts forward that the external environment, in particular the convenient location and safety environment of the HEI positively affects international students' satisfaction towards their institution.

5.2.4.2 Satisfaction towards Malaysia as Host Study Destination

International students' perception and satisfaction with their host country have been largely overlooked (Cubillo et al., 2006). To overcome this limitation, the study looked beyond the service quality of the institution to investigate international students' perception of Malaysia in order to offer a more holistic understanding of their overall study experience. As reported in Chapter 4 (Table 4.23), international students revealed a somewhat high satisfaction with Malaysia as a study destination in general (hypotheses H5a in table 5.3). Unlike perceptions towards the host institutions that were formed based on both tangible and intangible service quality, the fulfilment of Malaysia as a host country arose mainly from the intangible elements (see Section 5.2.4.2.1 and Section 5.2.4.2.2). Respondents of this study were very much satisfied with the overall image of

Malaysia as an international study destination. Interestingly, their contentment was based partially on the account of the effectiveness of Malaysia's visa and migration system. Two country attributes that were found positively affects international students' satisfaction towards Malaysia as study destination were the high quality education system and effective visa and migration system. The following discussions were made based on hypothesis test results in comparison to previous studies.

5.2.4.2.1 Malaysia's High Quality Education System

The research findings of this study showed that respondents were pleased with the image of Malaysia in provisioning high quality education of the country. Agreeing on the effect of positive country image promotes international students' satisfaction, Insch and Sun (2013) however suggested that a country with the image as a fun place to study is the key driver to students' satisfaction towards where they live in. In their study conducted in New Zealand, the authors identified the atmosphere and liveliness of the city, which includes shopping and dining, public transportation, as well as social interactions, as the attributes students valued most. Other researchers suggested that satisfaction with the study destination is subjective as individuals may have different needs, expectations and perceptions of the qualities of the place, thus influencing their level of satisfaction. Some students may place greater importance on a range of venues for socialising, whereas some may value safe spaces more (Insch & Florek, 2008; Insch, 2011). Despite the discrepancy on elements that constitute to a positive country image, the study infers that good reputation in particular a country that provides high quality education is more likely to boost the satisfaction of international students towards the host destination.

5.2.4.2.2 Effective Visa and Migration System

Subsequently, SEM results (see Table 4.23) also revealed that visa and migration related matters also attributed to international students' satisfaction towards Malaysia as a host country. The effectiveness of the visa and migration system has often been regarded as important criteria for attracting international students (Cubillo et al., 2006; Americanos, 2011; Cheng et al., 2013; Wintre et al., 2015; Ahmad & Buchanan, 2016; Kaur, 2016); this aspect is, however, not so common in satisfaction studies. Participants of this study specified a fairly positive experience with Malaysian visa and migration policy related

matters. As indicated in an earlier section (see Section 5.2.2.1.5), Malaysia practises hassle-free entry procedures to attract international students. The application process is usually assisted by the institution that offered the international student a place to study. With the aforementioned rationale, the study infers that effective visa and migration system of a country will generate positive satisfaction of international students towards the host country.

5.2.4.3 Positive Social Experience

Research findings (see Table 4.23) indicated social aspect as another country attribute that appeared significantly contributed to respondents' satisfaction (hypothesis H5c). The participants of this study claimed that they were delighted with their social experience within the campus, especially on how they have been treated by the local students. In fact, social experience has been commonly cited in existing literatures. Pyvis and Chapman (2007), Sojkin et al. (2012), Bianchi (2013), Chavan et al. (2014), and Finn and Darmody, (2016) had supported the positive effect of social experience in promoting international students' satisfaction in their studies.

The discussions on social experience in previous studies typically include both social interaction within the campus environment and/or social life in the community the students live in. Sojkin et al. (2012), for instance, pointed out that students tend to be more satisfied within well-defined social conditions. Chavan et al. (2014) proposed including social benefits onto the SERVQUAL model to investigate how the student-to-student relationship influences their evaluation of quality. The authors revealed that most international participants interviewed in their study spoke about their initial loneliness, comparing that to their high school experience where they were familiar with everyone. The contrast in the experiences initiated their desire to form rapid networks in the new environment. Social benefit is thus essential in enabling students to feel a sense of connection not only with the institution but also with their peers. This sense of belonging and attachment enhances their sense of identity and at the same time assists in enhancing their perceived value from the study experience. The authors claimed that the social dimension within university life is key to achieving a satisfactory study experience that has a direct relation to their retention on campus. In line with this study, Pyvis and

Chapman (2007) also claimed that acceptance by other international students was apparent evidence of their respondents' satisfaction. Similarly in a study conducted in Ireland, international students who were satisfied with their friendships were found to be two and a half times more satisfied with their studies (Finn & Darmody, 2016). Likewise in Bianchi (2013), research with international students in Australia showed that international students highly valued the possibility of feeling part of the local culture. This includes being employed by Australian companies, having local friends or even things like being invited to Australian parties.

Respondents in this study also reported having an overall positive social experience in Malaysia. This finding is again in accordance to existing literatures (Sam, 2009; Memon et al., 2014). Studies dealing with social aspects have also been associated with the external context, mainly the local community where they live. Sam (2009) for instance agreed that international students who successfully formed social ties with their local communities have reported a higher satisfaction level. Memon et al. (2014) suggested that as international students tend to spend more time in the community in which they belong, social interactions with the local community provide opportunities for them to broaden their knowledge and improve the level of satisfaction. According to the authors, international students not only get to experience new cultures by sharing food, learning new languages and customs, new friendships formed with the local community also give international students the opportunity to make life-long friends that they can visit in the future. In line with the above, this study infers that a positive social experience, whether within the internal and/or the external study environment promote a satisfactory study experience.

Respondents' overall satisfaction with their study experience in private HEIs in Malaysia was then measured using a single item taken from Athiyaman's (1997) satisfaction measurement scale. International students' overall satisfaction with their study experience in Malaysia was relatively positive and they were mostly satisfied. Overall the respondents reported that their expectations with private HEIs in Malaysia were reached or exceeded. As aforementioned (Section 2.9.2 of Chapter 2), this study also investigated the relationship between each transaction-specific satisfaction and overall satisfaction to

determine the proportion of variance in overall satisfaction being accounted for by the respective transaction-specific satisfaction under the three broad themes (host country, institutional and social experience). These factors were deemed as satisfaction drivers or the determinant of perceptions in shaping respondents' overall satisfaction of their study experience. Based on the hypotheses test results in Table 5.4 (relevant hypotheses are H6a, H6b and H6c), it was interesting to discover that the only satisfaction driver that positively influenced overall satisfaction in this study was host country related. The findings implied that international students' satisfaction with their institutions as well as their positive social experiences did not eventually amount to overall satisfaction. In other words, there could be other possible aspects of the respondents' study experience that the study might have overlooked. In regard to overall satisfaction, only a 68% variance was explained by the study (see Table 4.23).

Table 5.4: Hypothesis test results of international students' overall satisfaction in comparison to prior research

Hypotheses	Overall result	Results of prior studies
H6a There is a positive relationship between international students' satisfaction towards Malaysia as a study destination and their overall satisfaction.	Supported	No prior studies
H6b There is a positive relationship between international students' satisfaction towards their social experience in Malaysia and their overall satisfaction.	Not supported	No prior studies
H6c There is a positive relationship between international students' satisfaction towards their private HEI and their overall satisfaction.	Not supported	No prior studies

5.2.5 Overall Satisfaction and Willingness to Recommend

This section discusses the relationship between international students' satisfaction and their willingness to recommend (relevant hypotheses are H7a and H7b) in comparison to

prior studies in a similar context as summarised in Table 5.5. Within the context of this study, word of mouth (WOM) is pertaining to students' willingness to share with other people about their institution and their study experience in Malaysia. As reported in Section 4.3 of Chapter 4, the study affirmed that the willingness to recommend was highest when respondents were satisfied. Similarly, unwillingness to recommend was also highest when respondents were dissatisfied. The same outcomes were applicable on respondents' willingness to share their study experience in Malaysia, as well as the institution they were attending. There is strong evidence in the literature that supports this finding. High levels of student satisfaction have been linked to positive outcomes, such as increased student retention and loyalty (Athiyaman, 1997; Brown & Mazzarol, 2009; Carter, 2009; Chong, 2015), increased positive word of mouth (WOM) (Arambewela & Hall, 2003; Bianchi, 2013; Buddhichiwin, 2013; Chong, 2015), and eventually, increased brand equity (He & Li, 2011).

Table 5.5 Hypothesis test results of overall satisfaction and willingness to recommend in comparison to prior research

Hypotheses	Overall result	Results of prior studies
H7a There is a positive relationship between international students' overall satisfaction and their willingness to recommend Malaysia as a study destination through word of mouth.	Supported	Supported: Wiers-Jenssen et al. (2002), Helgesen and Nettet (2007), Gruber et al. (2010), Insch and Sun (2013)
H7b There is a positive relationship between international students' overall satisfaction and their willingness to recommend their private HEI to others through word of mouth.	Supported	Supported: Wiers-Jenssen et al. (2002), Helgesen and Nettet (2007), Gruber et al. (2010), Insch and Sun (2013)

Insch and Sun (2013) suggested that students' experiences with the host university city might determine their recommendations or complaint behaviour in the future. Likewise Gruber et al. (2010) supported that satisfied students are more likely to attract new students through positive WOM and to return for further study. It was agreed by Wiers-

Jenssen et al. (2002) and Helgesen and Nasset (2007) that verbal praise from satisfied students will not only attract new students, but also encourage existing students to take additional courses, reduce absence, transfer, and withdrawal. With consistent support from the previous literature, the study postulates that the higher the satisfaction the higher the tendency that international students will share and recommend their experience with others. On the contrary the intention to recommend is reduced as satisfaction dropped.

5.3 Multi-group comparison

In Chapter 4 multi-group analyses were carried out to investigate the effect of gender and types of HEIs on international students' overseas study experience at Malaysia's private HEIs. Discussions and implications below were made based on the test results reported in an earlier chapter (Section 4.4) in comparison with previous studies.

5.3.1 Gender Comparison

When comparing respondents based on gender in this study, the multi-group analyses as reported in Section 4.4.1, aimed to examine 1) If there were significantly different considerations (key pull factors) between the male and female students in their choice of study destination and HEI; and 2) If there was a significant difference in overall satisfaction between the male and female students with their overseas study experience in Malaysia. Table 5.6 displayed the outcomes of hypothesis tests results and the following discussions on gender effects were made in reference to the existing literature. The findings revealed minimal gender differences, in particular the key factors used for selecting a private HEI in Malaysia.

Table 5.6: Hypothesis test results of differences based on gender in comparison to prior research

Hypotheses	Overall result	Results of prior studies
H8a There is a significant difference in the perception of the host country factor between male and female international students' decision-making in choosing Malaysia as a study destination.	Not supported	Supported: Joseph et al. (2005), Sojkin et al. (2012)

H8b There is a significant difference in the perception of the institutional factor between male and female international students' decision-making in choosing their private HEI in Malaysia.	Not supported	Supported: Sohail et al. (2003), Joseph et al. (2005), Veloutsou et al. (2005) Not supported: Cho et al. (2008), Hemsley-Brown and Oplatka (2015)
H8c There is a significant difference in the overall satisfaction between male and female international students.	Not supported	Supported: Aldemir and Gulcan (2004), Sojkin et al. (2012), de Jager and Gdabomasi (2013) Not supported: Ansary et al. (2014)

5.3.1.1 Gender comparison of perception on Key Pull Factors

This section compares the key pull factors used between the male and female international students in their choice of study destination and HEI (relevant hypotheses are H8a and H8b in Table 5.6) that motivated them to study abroad. The study discovers no significantly different considerations between the two genders and this discovery supports previous studies by Cho et al. (2008) and Brown and Oplatka (2015).

When it came to select a host destination (hypotheses H8a), the results revealed gender difference in two factors (host country political stability and safety and host country image) out of the six host country factors. Research findings indicated male students placed a higher emphasis on the country's image as well as the safety environment than female students (see Table 4.28). This study suggested that male students were more likely to choose a country with a good reputation of a quality education system and was famous for having world-class institutions that offer highly recognised and internationally recognised qualifications. Similar results were reported in the Sojkin et al. (2012) study, where the authors discovered that male students were more influenced by the reputation, course and cost-related aspects of HEIs. This study also discovered that male students

projected higher concerns about safety aspects over the female students. A host country with good law and order as well as a low crime rate was more likely to attract male students. This finding was rather unanticipated, as the previous literature tended to suggest the opposite. Joseph et al. (2005), for instance, discovered females to be more particular with security issues in general, especially safety within the campus. As not all six host country factors indicated significant difference between genders, there was not enough evidence to support hypotheses H8a. The study thus suggests there is no significant difference in the perception of the host country factor between male and female international students' decision-making in choosing Malaysia as a study destination.

When it came to the selection of institution (hypotheses H8b), the test results revealed gender as identical in all five dimensions of institutional characteristics across gender. This implied that male and female students have an identical emphasis in selecting institutions. The findings are in line with a number of past studies (Cho et al., 2008; Hemsley-Brown and Oplatka, 2015) that also reported gender balance of the sample they used. Cho et al. (2008) in their survey conducted in USA discovered no gender differences. Similarly Hemsley-Brown and Oplatka (2015) noticed minimal dissimilarity between genders, whereby the authors concluded the differences were so minimal and hence insignificant. Some studies of the opposite persuasion highlighted the differences between male and female preferences on the choice of HEI (Sohail et al., 2003; Joseph et al., 2005; Veloutsou et al., 2005). For instance, a study in Malaysia undertaken by Sohail et al. (2003) identified that the HEI with the ISO 9002 award was preferred by the female students. Joseph et al. (2005) revealed that males reacted more positively to the availability of sports facilities, while females emphasised the safety issues. With no significant difference indicated across all five institutional factors, hypotheses 8b was thus rejected. The study postulates that there is no significant difference in the perception of the institutional factor between male and female international students' decision-making in choosing their private HEI in Malaysia.

5.3.1.2 Gender comparison of perception on Overall Satisfaction

As regard to gender differences on study experience (hypothesis 8c), the results revealed no significant differences between males and females in their overall satisfaction level (see Table 4.30). Both male and female students were reported to be equally satisfied with their overall study experience in Malaysia. This finding is in line with Ansary et al. (2014) study in which the authors also reported insufficient evidence on the effect of gender on students' satisfaction. Aldemir and Gulcan (2004), on the contrary, reported that female students were more satisfied than the male students in their study. Similar results were obtained in the de Jager and Gdabomasi (2013) study in which the males were noticeably less satisfied than the females. In the Sojkin et al. (2012) study, the authors noticed female students to be more satisfied with social conditions while the male students responded more positively in the quality aspect of courses.

Based on the above discussions, diverse perspectives on the gender effect were obvious in the existing literature and consensus has obviously not been reached. Similar to Ansary et al. (2014), the findings in views of gender differences regarding international students' overseas education were also inconclusive. There was no apparent gender difference reported and across a wider range of host country and institutional considerations (see Section 5.3.1.1), the male and female respondents tend not to differ. The differences were too minimal to be concluded as significant on an overall basis for the construct of country study destination and HEI considerations. Similarly there was no gender discrepancy indicated on respondents' study experience (see Section 5.3.1.2). The study thus concludes that there was no gender difference exhibited in international students' overall study experience in private HEI in Malaysia.

5.3.2 HEI Types Comparison

Multi-group analyses were also applied to explore the different types of HEIs with the aims 1) If there were significant differences in perception of key pull factors according to the types of HEI students enrolled in their overseas education in Malaysia; and 2) If there were significant differences in the overall satisfaction of students studying at different types of HEI in Malaysia. Hypothesis test results are summarised in Table 5.7. As this research constitutes a pioneer attempt at investigating international students' overseas

study experience in Malaysia across all four types of private HEIs (see Section 1.11), a comparison of the research findings to previous studies was restricted due to the lack of evidence in existing literature to make reference to. The following discussions are thus made based on the justifications that best reflect the current scenario of the private higher education sector in Malaysia.

Table 5.7 Hypothesis test results of differences based on HEI types in comparison to prior research

Hypotheses	Overall result	Results of prior studies
H9a There is a significant difference in the perception of the host country factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing Malaysia as a study destination.	Not supported	Ancheh et al. (2007)
H9b There is a significant difference in the perception of the institutional factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing their private HEI in Malaysia.	Not supported	No prior studies
H9c There is a significant difference in the overall satisfaction of international students from private universities, foreign university branch campuses, university colleges and private colleges.	Supported	No prior studies

5.3.2.1 Comparison on Perception of Key Pull Factors across different HEI types

Section 5.3.2.1 compares the perception of key pull factors used by respondents across different HEI types (relevant hypotheses are H9a and H9b in Table 5.7) that motivated

them to study abroad. Research findings (see Table 4.32) revealed mixed results that were inconclusive. There was thus insufficient evidence to suggest different behaviours and attitudes among respondents of different HEI types. Chapter 4 (see Section 4.4.2.1) identified four out of six host country considerations (host country political stability and safety, host country migration system, host country visa processing and host country attitude towards foreigners) to be different among respondents of different HEI types (see Table 4.32).

In regard to safety consideration, international students who were attending a foreign university branch campus appeared to be least concerned about the stability and security of a country when deciding where to study; while on the contrary, respondents from private colleges appeared to be most concerned about the safety aspect when choosing a study destination. The possible explanation for this difference could be due to the campus setting. Most, if not all private universities, foreign university branches and university colleges are properly and securely situated within a gated community. These institutions are more often than not highly functional campuses equipped with various types of facilities and infrastructure to cater for the different needs of students (Ancheh et al., 2007). The same may not apply to private colleges as the setting of private colleges often vary largely. While some large colleges may have a campus comparable to university settings, some smaller colleges may not have their own campuses. It is common for some smaller scale private colleges to be located in shop lot areas or residential areas. Security can be an issue, especially when the colleges are not gated and anyone can have access to them.

For factors pertaining to visa processing and the migration system, research findings showed mixed results. Findings revealed that respondents from foreign university branch campuses and university colleges were least bothered by matters relating to the visa and migration system of a country when choosing a study destination. International students from private colleges appeared to be most particular about the visa processing fee. The possible justification could be international students who choose to attend private colleges are more financially constrained; whenever cost is concerned it will be taken into consideration when deciding where to study. This explanation is made based on the

reasoning that costs for studying at private colleges are typically the lowest as they are institutions without a university title and they do not confer their own degree (Study Malaysia Online, 2015a). In a study by Ancheh et al. (2007) in six private universities and fourteen private colleges; the authors confirmed cost as one of the main criteria for students who enrol in private colleges.

The findings also suggested that respondents of different types of HEI also seemed to place a different emphasis on host country attitudes towards foreigners when choosing a country to study. Respondents from university colleges appeared to be least bothered by this factor. The best justification would be that university college students placed more emphasis on the selection of institution rather than which country to go to in their decision-making process. In general, country characteristics appeared to have the least impact for those attending university colleges when choosing which country to go to. The above discussions revealed mixed results on perception of key pull factors used by respondents across different HEI types. The study infers that there is no significant difference in the perception of the host country factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing Malaysia as a study destination.

On the same spectrum, the results (see Table 4.32) revealed that three out of five institutional related factors (institution reputation and recognition, institution program and course, institution facilities and support) to be different among respondents of different HEI types. With mixed results, there was no sufficient evidence to accept hypotheses H9b. Based on the test results, international students from foreign university branch campuses appeared to be most concerned with all three institutional aspects. Respondents from university colleges on the other hand were the least particular. This finding corresponded with Pyvis and Chapman (2007) in their research on Australian offshore branch campuses in Malaysia that demonstrated that the demand for Australian offshore higher education could be attributed to students' recognition of the superior quality of Australian education. Similarly Ahmad and Buchanan (2015) also supported that the image and reputation of the institution were the most important motivation for students to choose a foreign university branch campus. Due to mixed and inconclusive

test results, the study postulates that there is no significant difference in the perception of the institutional factor among international students from private universities, foreign university branch campuses, university colleges and private colleges in choosing their private HEI in Malaysia.

5.3.2.2 Comparison on perception of Overall Satisfaction across different HEI types

Last but not least, this section compares the respondents' study experience across the different HEI types (hypothesis H9c in Table 5.7). Test results (see Table 4.34 of Chapter 4) supported hypothesis H9c in confirming that there were significant differences in the overall satisfaction of international students from private universities, foreign university branch campuses, university colleges and private colleges in Malaysia. Results on the overall satisfaction of respondents across the different HEI types showed that international students from university colleges appeared to be least satisfied with their overall study experience in Malaysia. Meanwhile, respondents from private colleges recorded the highest satisfaction towards Malaysia as a host destination, whereas participants from foreign university branch campuses were most satisfied with the institution they were attending. It is worth to mention that, although there was no significant difference in selection criteria used by international students' in their decision-making across different HEI types (see Section 5.3.2.1), respondents seemed to react differently in their overall study experience.

5.4 Summary

This chapter discussed research findings based on data analysis test results in Chapter 4. The chapter began with an overview of the respondents' personal characteristics. A cluster random sample of 435 full-time international undergraduate and postgraduate students who are currently enrolled in a private HEI in Klang Valley Malaysia constituted this research. Out of the 435 respondents, 262 were male students and 173 were female student with the majority of the respondents aged between 18 and 25 years.

The interpretations of the research findings continued to explain international students' choice and decision-making regarding higher education at Malaysia's private HEIs. In most areas, research findings were found to be consistent with the existing literature.

Limited accessibility to the home country's higher education system was one of the reasons students leave their country of origin. Personal factors in particular students' personal perceptions of the superiority of overseas education as well as the endeavour for personal development were among the other push causes initiated respondents' intention for overseas education.

The chapter then followed by explaining the eleven key influencing factors (6 host country attributes and 5 institutional factors) affecting international students' choice of private HEI in Malaysia. The six country traits that had significantly and positively made Malaysia a popular choice among international students were: 1. positive study destination image; 2. friendly attitude towards foreigners; 3. political stability and safety; 4. social and cultural diversity; 5. easy and affordable visa processing and finally 6. a sound migration framework and policy. The factors identified are in accordance with those in the existing literature when it comes to selecting a study destination. Next, the five institutional attributes discussed were: 1. conducive learning environment with good international students' support system; 2. good HEI reputation that is highly and internationally recognised; 3. availability of high quality program and course; 4. convenient and safety location, and lastly; 5. ease of entry requirements. Together, these institutional aspects are essential in making a private HEI more attractive than the competing institutions. Similarly when it comes to institution choice, the findings of this study relate closely to prior studies that were conducted in various countries globally.

Subsequently, this study articulated decision to study in a private HEI in Malaysia is usually multidimensional. Due to the complexity of the decisions and choices involved, international students might not be the sole decision maker. Parents were found to be a profound influencer in the decision-making process. Other external parties included recommendations from friends and relatives, institution representatives, education agents as well as the internet as information source.

In regard to satisfaction, international students appeared to be satisfied with overall study experience at Malaysia's private HEI. Respondents perceived Malaysian qualifications as high quality and were pleased with the overall higher education system. Participants were

also satisfied with the effectiveness of the country's visa and migration system. Similarly international students responded positively towards both academic and non-academic service qualities of the institutions. Positive institution image, supportive learning environment as well as institution safety and convenient location were the three service qualities that constituted to a positive study experience of the respondents. Likewise, the study also identified that positive social experience fosters positive study experiences. Respondents of this study were happy with how other local students treated them in general; they were also contented with the attitude of Malaysians towards foreigners in general. The study also discovered that satisfied students are more likely to talk positively about their study experience with others.

The last part of Chapter 5 explained the results of the multi-group comparison. The comparisons focused comparing the perception of key influencing factors between male and female students, as well as their satisfaction level. Only trivial differences were identified and thus were not substantial to infer a significant different attitude and behaviour in gender. Likewise, mixed results were reported when comparing respondents from different HEI types and that too, led to an inconclusive conclusion to suggest there were significant differences on international students' decision-making according to the types of HEI.

A presentation of the key findings of this thesis is summarised in the following chapter. Chapter 6 justifies how this thesis is useful in shedding light for future research on international students' choice and decision-making of higher education at Malaysia's private HEIs

CHAPTER 6 CONCLUSION AND FUTURE RECOMMENDATIONS

6.0 Introduction

Chapter 6 is the concluding chapter. The summary of this thesis is presented in seven sections. Section 6.1 summarises the entire research process undertaken by the study. Next, key findings are elaborated in Section 6.2 in relation to how each research objective was achieved. Section 6.3 is the discussion of the research implications and contributions. This section highlights the various contributions of the thesis, practically and theoretically. Section 6.4 provides recommendations for policy makers and HEI administrators and recruiters. The chapter then specifies the limitations of the study in Section 6.5 followed by recommendations for future research in Section 6.6. The thesis ends with Section 6.7, a concluding note from the author.

6.1 Summary of Research

Private HEIs in Malaysia operate in a very competitive environment and face continued pressure in differentiating their courses and programmes in order to avoid having their products perceived by customers and potential customers as close substitutes to their competitors or not meeting customers' needs. When an HEI is perceived as offering a close substitute or not meeting customers' needs, its competitiveness and profitability will suffer (Porter, 2008). To counter competition and achieve strategic competitiveness, HEIs need to understand customers' needs for meeting their expectation and achieving customer satisfaction. Therefore, it is important for HEI providers to identify and understand the key factors influencing students' decision-making in choosing private HEIs in order to strategically position themselves in the market based on these factors. In addition, government and authorities responsible for providing important ancillary services and infrastructure for developing Malaysia into an appealing education hub would benefit from a clear understanding of the underlying motives behind international students' choice of country of study. This study adopts a holistic approach by looking into international students' entire study, living and social lives within the academic and host country context while probing their overseas study experience.

The conceptual framework of this study was developed based on two models: the consumer decision-making model (Kotler, 1997) and the push-pull theory (Mazzarol & Soutar, 2002). The research model includes a comprehensive range of key influencing factors drawn from different stages of the consumer decision-making (CDM) model as identified from the literature review of previous studies. The push or pull effect was also ascribed to each key influencing factor in the study. Finally, international students' satisfaction towards specific key factors and overall satisfaction were determined in the conceptual framework with the analysis extending to their behavioural intention as customer referrals through word of mouth (WOM).

A questionnaire survey was used in this research to measure the respondents' attitudes towards their overseas study experience at Malaysia's private HEIs. Random cluster sampling was employed for this research and target respondents were randomly selected from the four types of private HEIs (clusters): private university, university college, foreign university branch campus and private college within the Klang Valley area. The official data collection took place from 12 July 2016 to 24 August 2016 with the final survey distributed via both the online (web survey) and offline (mail questionnaire) methods. A total of 725 responses were collected from 29 private HEIs.

To ensure the completeness and accuracy of the data prior to conducting any analysis, data was screened for missing values, normality, multicollinearity and outliers. This process yielded a final sample size of 435 for the study. A number of statistical tools were used for data analysis purposes, which included descriptive analysis, factor analysis, reliability and validity analysis, structural equation modelling and non-parametric analysis.

6.2 Summary of Findings

This study was constituted from a cluster random sample of 435 full-time international undergraduate and postgraduate students who are currently enrolled in a private HEI in Klang Valley Malaysia. There were 262 male students versus 173 female students who participated in this study with the majority of the respondents aged between 18 and 25

years. Most of the interviewed students were enrolled in undergraduate and diploma studies. A high majority of the participants were financially funded by their parents.

Five research objectives were set at the start of this research and were achieved as follows:

Objective 1: To identify the key push factors and key pull factors influencing international students' decision-making in choosing private HEIs in Malaysia.

The study discovers a number of push and pull factors influencing international students' decision-making in choosing private HEIs in Malaysia. Push factors are a variety of internal and external influences (may be positive and/or negative) within the international students' home country that initiate them to leave their home country in the pursuit of an overseas education. Following the decision to study abroad, students' consideration focuses on selecting a potential study destination as well as a preferred institution. The considerations of host country and institution are affected by a combination of influencing factors (pull factors) that make Malaysia and the chosen private HEI stand out from other competing countries and institutions. A summary of these factors are as follows:

- **Push Factors — Reasons to Study Abroad**

This study identified that international students' motivations for studying abroad were multifaceted. Against the popular belief that limitations and restrictions from the home country (Mazarrol & Soutar, 2002) are the prime driver initiating students' decision to study abroad, limited accessibility to higher education opportunities did not emerge as a primary factor for 'pushing' respondents to leave their home country. Research findings suggest that the main stimulus for participants to study overseas stemmed from their inner motivation (internal influence). The personal perception that overseas education is better appeared to be the most dominant push factor (motivation) in forming international students' initial intention. Respondents typically perceived foreign qualifications would make them more competent and secure them a more promising career prospect in the future. Studying abroad promotes personal development is another push factor that motivated respondents in the pursuit of an overseas qualification. The intention was formed based on the desirability of meeting new people and experiencing a new culture.

- **Host Country Pull Factors — Reasons for Choosing Malaysia**

The study reveals that Malaysia was not the primary choice for international students. The majority of the participants have also considered other countries i.e. Australia, United Kingdom, USA, and Singapore when it came to deciding where to study. Malaysia was ultimately chosen based on the following six traits: a positive study destination image, friendly attitude towards foreigners, political stability and safety, social and cultural diversity, easy and affordable visa processing with a sound migration framework and policy. The two dominant traits that make Malaysia desirable to international students are: a popular study destination image and Malaysia as a foreigner-friendly country, both reflecting a positive country image. Considering that consumers often rely on a country's image to predict the quality of foreign brand products, this study postulates that a positive country image, especially when associated with a superior quality of higher education offerings, to be the key attraction pulling international students to Malaysia. Malaysia was preferred for its highly and internationally recognised qualifications. In addition, Malaysia being a foreigner-friendly nation with low discrimination also appeared to be attractive to international students. The study determined that the host country attitude towards foreigners is a critical element in shaping an overall positive country image. The more foreigner-friendly Malaysians are, the more likely it will be preferred by international students. Other supporting country attributes include Malaysia being comparatively safe and politically stable. The relatively low crime rate in Malaysia makes it an ideal country in which to study and live. In terms of social and cultural diversity, respondents felt that the multiracial characteristics and cultural diversity in Malaysia provide them with the opportunity to explore different languages, food, customs and traditions. The international students in this study also prefer a flexible migration system with an effective visa policy (easy processing and low fee structure). This study proposes an effective visa policy should be packaged as a distinctive selling point in promoting Malaysia as a destination for study.

The study concludes that when it comes to selecting a study destination, the influencing factors discovered by the study are consistent with those in the existing literature. The only discrepancy lies in the non-existence of a cost factor in this study.

Cost, a common influencing factor in the existing literature did not appear significant in this study. Judging that the cost of education to study in Malaysia is much lower compared to traditional popular country study destinations it is justifiable that cost did not appear to affect international students from selecting Malaysia. Furthermore, close to 90% of the interviewed participants were financially sponsored by parents, and thus it is reasonable to assume that cost was not an issue. Similar findings are also reported in some prior research that the cost of education did not affect international students' choice of study destination (James et al., 1991; Imenda et al., 2004; Briggs & Wilson, 2007).

- **Institutional Pull Factors — Reasons for Choosing Current Private HEI**

The study identifies a plethora of institutional traits as pull factors in attracting international students to choose a private HEI in Malaysia. Similar to the decision to study abroad and the selection of a study destination, the choice of a particular institution was also multidimensional. The five institutional related factors are campus facilities and the international students' support system, reputation and recognition, program and course, institution location, and lastly, ease of entry requirements. The institution facilities and support systems, which refer to the availability and accessibility of various sports, leisure, recreation facilities and support services, appeared to be the primary factor that mattered to the respondents. Even though the availability of campus facilities is a common factor cited in the existing literature, it is not usually a critical selection criterion in international students' choice of institution. This study thus suggests that a good campus environment should not focus narrowly on the establishment of campus facilities and infrastructure; it should also encompass the provision of good support services – a conducive study environment that ensures that both the physical and mental health of international students is well taken care of. The next two key institutional traits that subsequently followed were academic related: institution reputation and recognition and academic programs and courses. Both factors were rated equally important when it came to selecting an institution. In regard to reputation and recognition, this study took a broader breadth to include the institution's brand image, institution ranking, strategic links and alliances, as well as the employability aspect upon graduation as major influencing criteria. Subsequently

the quality, availability, variety, as well as the medium of instruction of educational programs, also impacted on the respondents' choice of HEI. The findings of this study relate closely to prior studies that were conducted in various countries globally. In addition, the study also discovered that the location of the institution, as well as the ease of entry requirement, were also part of students' selection criteria, despite being less influential. Finally, it is also worth mentioning that the institutional factors appeared to be more dominant in participants' decision-making than host country factors. This implies that respondents placed more emphasis on choosing a suitable institution rather than which country to study in. In order to increase the likelihood of international students' choice of studying in Malaysia, an enhancement in institutional characteristics would have a stronger impact than a lift in a country's characteristics.

Objective 2: To investigate the relationship between international students' study decisions and their satisfaction levels.

The study acknowledges that international students' study experience was influenced by both internal and external learning environments. The study measured the respondents' satisfaction level towards the decisions that they made based on the key influencing factors through the transaction-specific and overall satisfaction approach. Transaction-specific satisfaction was measured in regard to their choice of Malaysia as the host study destination, the private HEI they were attending, and their general social experience in Malaysia. The study also investigated the relationship between each transaction-specific satisfaction and overall satisfaction to determine the proportion of variance in overall satisfaction being accounted for by the respective transaction-specific satisfaction under the three broad themes (host country, institutional and social experience).

- **Satisfaction towards Malaysia as a host study destination**

International students appeared to be satisfied with Malaysia's image/reputation as a study destination in general. Respondents were pleased with the overall higher education system in which students perceived Malaysian qualifications as high quality. The finding was found to be consistent with the influencing factor that initially affected their choice of study destination. This accentuates the importance of positive image in making a country a popular study destination. On the other hand, while visa processing

and the migration system did not appear to be critically influential during respondents' early decision-making when deciding where to study, it appeared to affect participants' study experience. International students' contentment towards Malaysia as a study destination was partially built on account of the effectiveness of the country's visa and migration system. This implies that Malaysia's efforts in practising hassle-free visa processing (fast entry processing and easy renewal procedure) turns out to be effective. In order to attract more international students to Malaysia, the authorities should continue to improve and ensure the implementation of a stress-free visa policy and migration framework.

- **Satisfaction with the current private HEI**

Similarly international students responded positively towards various service qualities of private HEIs in Malaysia, of both academic and non-academic dimensions. The academic aspects include a positive institution image as well as a supportive learning environment; non-academic aspects in particular related to institution safety and convenient location. While reputation and recognition are often viewed as a quality anchor of the education received, it was no surprise that it turned out to be the strongest aspect that positively shaped international students' satisfaction towards the institution they enrolled at. A supportive learning environment testified as the second-most satisfied service element for the participants. More specifically, respondents of this study exhibited high fulfilment with the institution's efforts (providing both general and learning support) in taking care of their welfare. It was the human factor, specifically the helpfulness and supportiveness of both the academic and non-academic staff that drove participants' satisfaction. Furthermore, despite not being a critical service element, safety and a convenient location appeared to be the non-academic aspect of the institution that positively affected international students' study experience. The study concludes that the institutional characteristics that attracted international students during their early decision-making also turned out to define their study experience at the institution in the later stage.

- **Satisfaction with the general social experience in Malaysia**

The respondents of this study were satisfied with their social experience within the internal and external environment of the campus. Internally within the campus, international students were happy with how other local students treated them in general. Externally in the community, respondents were contented with the attitude of Malaysians towards foreigners in general. The study identified that this positive social experience fosters positive study experiences.

- **Overall satisfaction**

Respondents reported that their overall expectations with private HEIs in Malaysia were reached and exceeded. However the study discovered that the only satisfaction driver that influenced overall satisfaction was host country related. Institution experience and social experience did not appear to positively affect participants overall satisfaction. There could be other possible aspects of the respondents' study experience that the study might have overlooked judging that only 68% variance of respondents' overall satisfaction was explained by the study. The study thus concludes that a positive country image as a popular study destination ultimately shapes the overall satisfaction of international students' study experience in Malaysia.

Objective 3: To investigate the relationship between international students' satisfaction levels and their future word of mouth behaviour in consumer referrals.

The study discovered that satisfied students are more likely to talk positively about their study experience with others. The same outcome applied to respondents' willingness to share their study experience in Malaysia, as well as the institution they were attending. The findings confirmed that the willingness to recommend was highest when respondents were most satisfied. In contrast, the unwillingness to recommend was highest when respondents were dissatisfied. This study upholds the view that a positive study experience manifests a positive word of mouth behaviour in consumer referrals.

Objective 4: To determine whether there are significant differences in the perception of key influencing factors on decision-making between male and female international students.

When comparing respondents based on gender, the results appeared to be inconclusive. There were minimal gender differences exhibited when it came to the choice of study destination. The male participants placed more emphasis on a country's image and its safety attributes when deciding where to study. On the other hand, the study testified gender identical on all five dimensions of institutional features between males and females. Similarly in regard to students' satisfaction, the study discovered no gender difference in international students' overall experience. Both male and female respondents achieved an overall positive study experience in Malaysia. In summary, even though the study discovered significant gender differences towards country image and safety issues (two of the items that represent the construct of country of study destination), these differences were too minimal to be concluded as significant on an overall basis for the construct of country study destination. These differences were not substantial to infer a significant different attitude and behaviour in gender when considering the country to study.

Objective 5: To determine whether there are significant differences in the perception of key influencing factors on international students' decision-making according to the types of HEI (private university, foreign university branch campus, university college or private college).

The research findings revealed mixed results when investigating the attitude and behaviour of international students in different types of private HEIs in Malaysia. The research identified four out of six host country considerations (host country political stability and safety; host country migration system; host country visa processing; and host country attitude towards foreigners) to be different among respondents of different HEI types. Similarly three out of five institutional related factors (institution reputation and recognition; institution program and course; institution facilities and support) also appeared different among respondents of different HEI types. The mixed results led to an inconclusive conclusion to suggest there were significant differences in the perception of key influencing factors on international students' decision-making according to the types of HEI.

As this research was the first to investigate international students' overseas study experiences in Malaysia across all four types of private HEIs, the comparison of research findings to previous studies was restricted due to the lack of evidence in the existing literature to make reference to. The discussions are thus made based on the assumptions that best reflect the current scenario of the private higher education sector in Malaysia. This research postulates that despite there being a lack of evidence to suggest a significant difference in the selection criteria of international students' decision-making across different HEI types, the study suggest that further research such as qualitative research be conducted on those items which were perceived to be significantly different by international students from these different HEI types for the purpose of exploring strategic institutional positioning.

6.3 Contributions of the Study

The findings of this study add new dimensions to the existing literature pertaining to higher education research or more specifically the thesis contributes to enriching current literature in the field of the private higher education sector in Malaysia. The first and most notable value of this research lies in the development of a conceptual model that enables an understanding of the complex choices and decision-making of international students for selecting a private HEI in Malaysia. This research adopts the two most representative models: the consumer decision-making (CDM) model (Kotler, 1997) and the push-pull theory (Mazzarol & Soutar, 2002) and compacted them into a comprehensive and more user-friendly version. Although the chosen CDM model is generic, it permits complex behaviour to be reviewed into meaningful parts, allowing the accommodation of individual target population (prospective international students) and market variation (Malaysia as host country and private HEIs as host institutions) in the analysis. Using a consumer decision-making model as the base, the push-pull theory is mapped onto the model to exhibit that within the decision-making exists a bundle of push-pull factors that will affect the students' choices. The proposal of this new integrated model provides a powerful and adaptable tool towards meeting the primary objective of this research: to investigate the key factors influencing international students' choice of private higher education institutions in Malaysia. The distinction between the push and pull factors, as well as the identification of student satisfaction towards these factors enable government

to identify destination attributes that are important and that appeal to international students, and thereby support the development of these attributes to better satisfy target needs. Similarly this information may provide insights for HEIs in designing highly differentiated products that meet consumer expectations.

Unlike most of the previous models that focus only on the choices made by international students, this study takes into consideration international students' satisfaction towards their study experience. By not restricting the research scope to the choice stage, this study allows a more comprehensive understanding of students' study experience. Taking students' satisfaction into consideration, the model provides a more complete outlook of international students' overall study experience in Malaysia. According to Sojkin et al. (2012), choice factors can predict the variability of satisfaction factors. Agreeing with the authors, the findings of this thesis also discovered that choice factors much more often were closely similar to the service quality aspects that shaped international students' satisfaction. For instance, while institution facilities and support systems appeared as the primary influencing factor in this study, a supportive learning environment turned out to be one of the critical service elements that led to a satisfied institution experience. Similarly while reputation and recognition were among the key factors constituting the respondents' selection of a private HEI in Malaysia, service dimensions that are related to 'good reputation and positive image' simultaneously contributed to a positive higher education experience at Malaysia's private HEIs. A further instance of this was the high resemblance in factors pertaining to social conditions. While 'attitude towards foreigners' was cited as an important criterion when assessing a study destination, 'social experience' turned out to positively determine students' satisfaction towards their overseas study experience in Malaysia. This thesis provides evidence that knowledge about choice factors may be valuable in predicting which factors students consider important when evaluating their study experience. On the basis of this information, this gives insight into government authorities and HEI administrators to identify which key features require immediate and ongoing attention to meet the perceptions and expectations of current and future international students.

As aforementioned, this research constitutes a pioneer attempt to include all four types of private HEIs into a comparison. This study considers a comprehensive set of key influencing factors that provide a clear distinction of push and pull effects. This distinct segregation has not been captured by prior studies in the research context of Malaysia, and in particular no prior research has been included to study and compare the four different types of private HEIs. This research investigates whether international students from the four different types of HEIs (private university, foreign university branch campus, university college and private college) in Malaysia are influenced by different key factors in their decision-making. With the heightening competition in the private higher education sector in Malaysia, there are immense options of HEIs that offer similar in-demand-driven programs. Private HEI providers in particular face overwhelming pressure in vying for international students. Their survival is thus dependent on possessing a clear understanding of the key factors influencing students' choice of HEI to create distinctive competitive advantages that are difficult to replicate and sustain over time. The identification of the push and pull factors relevant in students' decision-making, as well as their satisfaction regarding these factors in this study, will help private HEIs to craft a more effective international recruitment strategy.

6.3.1 Theoretical Implication

This study offers an integrative and holistic theoretical framework to guide future research inquiry and for exploring in detail the key factors influencing students' decision-making in choosing private HEIs and their satisfaction towards the specific key factors, as well as for investigating differences in perception among students from different HEI types.

The framework of international students' choice of private HEIs in Malaysia was developed through complex modelling procedures using structural equation modelling (SEM) which is deemed most suitable to investigate the underlying correlations between multiple constructs. SEM is an advanced statistical technique commonly used to test how a set of variables defines factors and how these factors are linked to one another. As discussed in Chapter 3, SEM has superior advantages over conventional multivariate analysis as it allows the identification of a causal relationship of multiple constructs

simultaneously. No doubt SEM has previously been applied in the area similar to this thesis, but those studies are typically limited to the choice stage. There is no study that uses SEM to deploy a model that looks beyond what happens after a choice is made. Hence the study contributes to methodological knowledge in particular to investigate the complex decision-making process of international students through a SEM framework. The supremacy of the model lies within its capability of analysing the weight of each influencing factor that affects international students' choice and decision-making. By understanding how students prioritise the criteria of choices made, the model offers more utility functions to guide HEIs in fine-tuning their target marketing. For instance, having the knowledge that international students in private colleges most emphasise the security aspects within the campus, private colleges can work towards tightening security controls around the campus environment to ensure that the highest level of safety is provided.

6.3.2 Practical Implications for Policy Maker, HEI Administrator and Recruiter

Should Malaysia realistically want to compete with leading study destinations to become an international education hub, it will have to continually improve the provisioning of high quality education. The study puts forward some constructive recommendations for identifying and transforming Malaysia's core strengths into competitive advantage in order to contend more strategically in the region against neighbouring competitors.

- Improving the overall reputation of higher education in Malaysia by standardising the higher education system to an equivalent international standard. Having a higher education structure that is comparable universally enhances the global recognition of Malaysia's qualifications. For students who wish to advance their higher education in another country, the qualification they obtained earlier in Malaysia can also be recognised elsewhere. Some practical solutions may include a tight accreditation process on private HEIs and the academic programs offered and introducing a national level of examination and assessment system that is recognised by international standards. Furthermore, in order to improve the quality of the provisioning of higher education, HEIs should be audited on a regular basis. Private HEIs that fail to keep up to a consistent level of service performance should be penalised from recruiting

international students.

- Most of the top universities in the world engage actively in research and publication. This effort should be benchmarked by HEIs in Malaysia and it cannot be done without support from the government. The higher education authorities should realise that as private HEIs are self-financed in most cases, a lack of research funding and facilities is often a hindrance preventing an active engagement in research and publication. To enhance the research qualities in Malaysia to be on par with international standards, initiatives in facilitating research are crucial. For instance, an increase in research grants and funding is essential. In conjunction with the government's efforts, initiatives from HEIs are equally critical. HEIs should include participation in research as a key indicator in assessing academic staff performance. In order to improve research skills and knowledge, continuous training in research skills and knowledge, encouraging research knowledge sharing and/or skill transfer among academic staff, enrichment of research facilities, and facilitating research collaborations both within and inter-institutions are some areas HEIs can improve on.
- Even though the government has envisioned recruiting 200,000 international students by 2020, they should always bear in mind that quantity is not the sole determinant of success; it is the quality of students recruited that matter most. A similar understanding should also be applied to HEI administrators and recruiters. After all, the ultimate aim should focus on recruiting international students who come with a genuine interest to study. A more standardised entry requirement should be implemented.
- In addition to the study aspect, living and social conditions are also an important part of international students' overseas study experience that should not be overlooked. HEIs, in conjunction with government support, can also introduce more community engagement programs targeting international students. The Australian government, for instance, pledged a national community engagement program to involve international students in community life in order to make them feel welcome and adapt to local communities.

- Visa processing and the migration system are two other aspects that should not be neglected, as visa-related matters have positively influenced participants' attitudes towards Malaysia. The Malaysian government should work on humanising the visa procedures to maximise the user friendliness of the system. After all, visa and immigration procedures are among the earliest processes of overseas education and a good first impression towards the host country is essential in affirming subsequent experiences throughout the study period.

6.4 Limitations of Study

This thesis has limitations that may restrict the generalisation of its findings and it opens new directions for future research.

6.4.1 Sampling and Generalisability

- Single country sample – The intention for this study is to research and recommend a set of influencing factors specific to the Malaysian context through the adoption and modification of existing students' choice and decision-making model, even though some researchers argue that studies from a single country may be a narrow approach (Hemsley-Brown & Oplatka, 2015).
- Single area sample – The respondents of this study were drawn randomly from different private HEIs in Klang Valley Malaysia. Even though Klang Valley is reported to have the highest number of institutions in Malaysia, gathering participants from a single area might result in the over representation of research outcomes. The findings of this study might not be applicable to international students in other geographical areas.
- Uneven distribution of HEI types – The number of different types of HEIs that participated were not identical. This makes the accuracy of the comparison of different HEI types debatable and caution must be taken in generalising the results.
- Sample size and SEM process – The final sample of this research consisted of 435 international students. Although the sample size is sufficient for the research, the

distribution of international students of each HEI type is not equal and also not adequate for SEM process (requires a minimum sample size of 200 for each group) which potentially offers more information for analysis. However, an alternative analytical technique Kruskal Wallis test is used and it addresses the objective in the study.

6.4.2 Data Collection Instrument

In order to have a thorough understanding of international students' decision-making in choosing a private HEI in Malaysia, the study developed a comprehensive questionnaire that was six pages long. Due to the lengthiness of the questionnaire, it was a challenge to ensure valid and truthful answers from all participants. It was possible that respondents lost interest and patience while attempting the questionnaire and yet were obliged to complete the questionnaire. However, this study minimises such problems by informing respondents (prior to the commencement of the survey) the time duration of the survey, participation is voluntary and they could withdraw from the survey at any stage. The study takes it in good faith that respondents who completed the questionnaires have answered the questions truthfully. In addition, the study excludes questionnaires that were not completed due to a loss of interest.

6.4.3 Time Frame of the Study

Instead of conducting longitudinal research to examine respondents' attitudes and behaviour at different stages of the international students' decision-making process, the study requested participants to answer the questionnaire by recalling how choices and decisions were made. The lack of a time gap in measuring participants' decisions and satisfaction might not be the most suitable method to explore the multifaceted and complex nature of this decision-making. This leaves room for future research to conduct a longitudinal study in gauging the different behaviours at different stages of the decision-making process.

6.5 Recommendations for Future Research

For future research direction, the study puts forward a proposal for expansion of research scope, longitudinal study, larger group sample sizes for comparative study as follows:

- Geographical coverage – A proposal for future research to expand the area of study to include institutions in other areas outside the Klang Valley. A wider geographical area of investigation may be useful in evaluating the impact of different city characteristics on international students' choices and decision-making.
- Bigger and balanced sample sizes for group analysis using SEM process.
- Increase the number of HEIs – Similarly a larger number of institutions to take part in the study may enhance the generalisability of the findings.
- Undertake qualitative research for indepth understanding of items that were perceived to be significantly different by international students from different HEI types to improve strategic institutional positioning.
- Encapsulate a wider range of items to operationalise the construct of overall satisfaction to advance understanding of the importance of overall satisfaction in international students' choice of private HEIs.
- Future research may consider repeating this study by conducting longitudinal research to track the different stages of the decision-making of international students, particularly to track pre and post decision. Higher education usually takes place over a long period of time and international students' attitudes and experiences might change based on the different encounters they experience. The key benefit of a longitudinal study is the ability to examine the changing patterns (changes in behaviour) of students over time. It allows researchers to probe the underlying relationship between factors over a long period of time, thus making longitudinal research more accurate in exhibiting the causal effect of the relationship between variables.

6.7 Concluding Note

This study reveals key factors, segregated into push and pull effect, influencing international students' decision-making in choosing private HEIs in Malaysia.

International students' decision to study abroad typically derives from their perception that overseas education is better than the home country qualifications. International experiences, while striving to meet educational goals, are another common motivation for students to opt for overseas education. During the search for a prospective study destination and institution choice, students may obtain important information from a third party, such as parents, relatives, friends, HEI representatives, education agents, as well as internet searches. Similarly the study discovers the strong influence of parents and recommendations from others in affecting international students' decision-making. When it comes to deciding where to study, a positive study destination reputation portraying a foreigner-friendly image are key attractions for international students when evaluating a host destination. Other supporting traits of country characteristics include political stability and safety for a conducive study environment, social and cultural diversity for fascinating international experiences, as well as easy visa processing and a flexible migration system.

The study also discovers that the choice of institution appears to be more vital than the choice of country destination when it comes to making decisions pertaining to overseas education. The most dominant influencing institutional factor is related to campus facilities and a good support system. The subsequent deciding factors pertain to a quality education: a distinctive institution image, in particular, associated with a good reputation and international recognition, as well as having a wide range of academic programs and courses are essential. Private HEIs that are equipped with these criteria are more likely to be the chosen ones. Other supporting institution traits include strategic location and ease of entry requirements.

Another astounding finding of this thesis is the non-significance of the cost factor in international students' decision-making. Cost has always been prevalent in student-related research and previous studies often suggest that affordability is the primary attraction that makes Malaysia a preferred study destination. The finding probes a new direction suggesting Malaysian policy makers and HEI practitioners move away from the emphasis on it being low cost to study in Malaysia and efforts should be made to improve the quality provisioning of education.

This study finds a positive relationship between international students' study decision and their satisfaction towards their HEI, as well as satisfaction towards their social experience in Malaysia. In addition, overall satisfaction of the respondents has been found to have a significant effect on their willingness to recommend Malaysia and their private HEIs to others via word of mouth - a potentially free marketing tool that higher education providers could use to recruit international students. This thesis identifies that future research on operationalising the construct of overall satisfaction is warranted for advancing the understanding of the importance of overall satisfaction in international students' choice of private HEIs.

Group comparison is undertaken in this study to determine whether there have been differences in the perception of key influencing factors and overall satisfaction based on gender and different HEI types. In the terms of gender differences, this thesis reports no apparent gender discrepancy in international students' perception across a wider range of host country and institutional considerations. Likewise, the study finds no difference in overall satisfaction between male and female students towards their private HEIs in Malaysia. In regard to comparison of international students from different HEI types, the study finds there is no difference in their perception of key factor influencing their choice of private HEIs in Malaysia regardless whether they are studying at private university, foreign university branch campus, university college or private college. However, the study finds a significant difference in the overall satisfaction of international students from private university, foreign university branch campus, university college and private college. International students from university colleges appeared to have the least overall satisfaction with their choice of their HEI in Malaysia. The results suggest international students of different HEI types may hold different level of overall satisfaction and this warrants future research such as qualitative research to gain an indepth inquiry into these differences that would benefit private HEIs in their strategic institutional positioning in Malaysia.

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APPENDIX A

Questionnaire Survey

INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH

INFORMATION TO PARTICIPANTS:

You are invited to participate in a research project entitled **International Students' Choice of Tertiary Education at Malaysia Private Higher Education Institutions (HEIs)**. This project is being conducted by a student researcher **Ms Teah Woon Sim, Chloe** as part of a DBA study at Victoria University under the supervision of **Dr Michelle Fong** and **Dr Thu-Huong Nguyen** from College of Business.

This study will examine international students' decision of choosing private HEIs in Malaysia. The intense competition has changed the phenomenon in higher education market. Most HEIs today are taking a marketing notion, where higher education is marketable service and students are treated as customers. With a consumer centred approach, the importance to understand the consumers' (international students') behaviour has become valued. This research is specifically interested in finding and analysing the choices international students have and the factors influencing their decision making process. This study intends to understand the decision making process of international students. This include examining: How decisions to study abroad are made?; How decisions about the choice of study destination and private HEI are made?; Are the decisions made under the influences from others? If yes, who are they?, and finally, which factors influence the international students' satisfaction in relation to their overall student experience?

For the purpose of this study, a questionnaire survey has been developed to help unveil the complex decision making process of international students. All information provided will be strictly confidential. The data with no identifying features will be summarised and reported in the thesis and any subsequent publications. Thus, your anonymity is guaranteed. Results from this study will provide useful insights for Malaysia government, private HEIs and other stakeholders for further actions to improve Malaysia's higher education system.

There are 6 sections with a total 28 questions in the questionnaire. It will take approximately 20 minutes to complete the survey. **By completing and submitting the survey, you are agreeing to participate.**

- SECTION A: Decision to study abroad
- SECTION B: Decision on the choice of study destination
- SECTION C: Decision on the choice of education institution
- SECTION D: Reference group's influence on the decision to study abroad
- SECTION E: Satisfaction Level
- SECTION F: Personal Details

I thank you in advance for your anticipated cooperation and participation in this survey. Any queries about your participation in this survey may be directed to the chief researcher (principal supervisor): Dr Michelle Fong, richelle.fong@vu.edu.au or the researcher: **Teah Woon Sim, Chloe**, woonsim.teah@live.vu.edu.au

If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 3001, email Researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

NOTE: Please ✓ in the appropriate places or write your opinion in the spaces provided

I have never participated in this survey before. ☐ Yes ☐ No

[This questionnaire is available in both online (web survey) and offline (mail questionnaire) format. Please make sure that you only participate this survey once]

SECTION A: Decision to study abroad (There is 1 question in this section)

A1. Why did you decide to study abroad?

I decided to study abroad because	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
political instability in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
economic instability in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
limited career opportunities in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
limited infrastructure & facilities in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
limited research funding in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
limited choice of institutions in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
limited choice of programme/ course in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
low quality of higher education system in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not get a place in local education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
foreign qualifications are preferred by employers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
foreign qualifications have better quality.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
foreign qualification secures me with a higher salary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
foreign qualification makes me more competent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad increases migration opportunity in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad increases my international exposure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad allows personal development.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad allows career advancement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad allows me to meet new people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad allows me to experience new culture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad allows me to learn new language.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad allows me to travel and have fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
study abroad allows me to be more independent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
my parents expected me to study abroad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
my other family member is currently studying abroad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION B: Decision on the choice of study destination (There are 3 questions in this section)

B1. Is Malaysia your first choice of study destination?

- ☐ YES (If yes, go to question B3)
☐ NO (if no, go to question B2)

B2. Which other country did you consider before deciding to choose Malaysia as your study destination? (You may choose more than one answer)

- ☐ United States ☐ United Kingdom
☐ Australia ☐ Singapore
☐ Other (please specify) _____

B3. Why did you choose Malaysia as study destination?

I chose Malaysia as study destination because	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
Malaysia is a popular study destination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has high quality of higher education system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I chose Malaysia as study destination because	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
Malaysia has world class institutions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia qualifications are highly & internationally recognised.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is a foreigner friendly country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has low discrimination towards foreigners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is a multiracial country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is culturally diverse.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is an Islamic country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is religiously diverse.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is a peaceful and harmonious country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has beautiful natural environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has low crime rate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has good law & order.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has low cost of living (food, transport, accommodation).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has stable currency exchange rate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English is a common language in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
people in Malaysia understand my home country language.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is close to my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia has fast & easy visa processing system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia visa processing fee is affordable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia allows international student to work whilst study.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia allows international student to stay back and work after graduation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia offers better chance for future migration.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have family/ friend living in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it is recommended by others to study in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION C: Decision on the choice of education institution (There are 3 questions in this section)

C1. Is your current education institution your first choice of education institution?

- ☐ YES (If yes, go to question C3)
☐ NO (If yes, go to question C2)

C2. Which other education institution did you consider before deciding to choose your current education institution? (You may answer more than one)

C3. Why did you choose your current education institution?

I chose this education institution because	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
it is a world class institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it is internationally recognised.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
its qualification is recognised in my home country.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has high international education institution ranking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has a long history of establishment as an education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has strong academic links and alliances with other education institutions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has strong industry links and alliances.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it increases my employability upon graduation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has high employment rate for its graduates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I chose this education institution because	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
it has high quality programmes & courses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has high quality academic staffs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has a good diversity of academic staffs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it uses English as a medium of teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has wide range of programmes & courses offered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has highly recognised programmes & courses offered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has the programme/ course I want.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has reasonable duration for programmes & courses offered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it allows flexibility in programmes & courses offered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has low entry requirement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it allows credit transfer for prior learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it recognises my prior qualification.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has affordable & reasonable tuition fee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it provides scholarship & financial aids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it is conveniently located.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has safe surrounding & neighbourhood.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it is safe within the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it is located near to hospital, shops, restaurants, transportation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has good and well maintained facilities & infrastructure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has well equipped sports, leisure, recreation facilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it has good student support services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
it is recommended by others to study in this education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have family/ friend studying here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION D: Reference group's influence on the decision to study abroad (There are 5 questions in this section)

D1. Who made the following decisions?

	Myself	Parents	Family (Joint Decision)	Other (Please Specify)
Decision to study abroad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Decision to choose Malaysia as study destination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Decision to choose current education institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Decision to choose current course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

D2. To what extent were you informed on the followings prior to your decision making?

	Perfectly informed	Well informed	Moderately informed	Appropriately informed	Slightly uninformed	Moderately uninformed	Extremely uninformed
Information about Malaysia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information about current institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information about current course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D3. Did you use the following information source during your decision making process? If yes, indicate the level of importance such information source on influencing your choice. If no, please select not applicable.

	Level of importance							Not applicable
	Extremely important	Very important	Moderately important	Neutral	Slightly important	Low importance	Not at all important	N/A
Parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family & Relatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institution Representatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education Agent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online Search	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recommendations from others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D4. To what extent do you agree on the following statements relating to the general marketing issues on how Malaysia is promoted as a study destination.

	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
General information about Malaysia as a study destination is readily available.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Updated information about Malaysia as a study destination is easily accessible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Updated information about Malaysia higher education system is easily accessible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advertisement campaigns contain truthful information about Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government authorities are responsive to my inquiry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government authorities are helpful & attentive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government authorities provide me with correct information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have no problem in communicating with the government authorities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Malaysia is capable of becoming a dominant higher education provider in South East Asia region.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

D5. To what extent do you agree on the following statements relating to the general marketing issues on how higher education institutions in Malaysia promote themselves.

	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
General information about education institution is readily available.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Updated information about education institution is easily accessible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Updated information about programmes & courses are easily accessible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advertisement campaigns contain truthful information about the education institutions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education institutions' representatives are responsive to my inquiry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education institutions' representatives are helpful & attentive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education institutions' representatives provide me with correct information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have no problem in communicating with education institutions' representatives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION E: Satisfaction Level (There are 4 questions in this section)

E1. Please indicate the level of satisfaction of your overall experience on the following statements.

	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
I am very satisfied with Malaysia as a study destination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall experience with Malaysia as study destination exceeded my expectation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
I am very satisfied with my education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall experience with my education institution exceeded my expectation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very satisfied with the course at my education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall experience with the course at my education institution exceeded my expectation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E2. Please indicate your level of satisfaction with Malaysia as study destination on the following statements.

	Completely satisfied	Mostly satisfied	Somewhat satisfied	Neither satisfied or dissatisfied	Somewhat dissatisfied	Mostly dissatisfied	Completely dissatisfied
Malaysia as a study destination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The higher education system in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The cultural diversity in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The attitude towards foreigners in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The social experience in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The safety and order in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The cost of living in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The common use of English in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The visa processing system in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The migration policy in Malaysia.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The access to public transportation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E3. Please indicate your level of satisfaction with your education institution and course on the following statements.

	Completely satisfied	Mostly satisfied	Somewhat satisfied	Neither satisfied or dissatisfied	Somewhat dissatisfied	Mostly dissatisfied	Completely dissatisfied
The institution you are attending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reputation of your education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The international recognition of your education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ranking of your education institution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The industry links and alliances.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The academic links and alliances.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The range of programmes & courses offered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The duration of your course.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of your course.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The teaching quality of the academic staffs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The service quality of administrative related matters.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The efforts in taking care of international students' welfare.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The general support system for international students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The learning support system for international students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The attitude of academic staffs towards international students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The tuition fee charged.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The location of the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The safety of the campus.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The access to public transportation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The access to campus facilities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The social experience with local students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The attitude of local students towards international students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

E4. Please indicate your answer on the following statements.

	Strongly agree	Agree	Somewhat agree	Neither agree or disagree	Somewhat disagree	Disagree	Strongly disagree
I will continue to study until I complete this programme.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I might return to this education institution to pursue another degree.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will recommend this education institution to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I might return to Malaysia to pursue another degree.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will recommend Malaysia as study destination to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION F: Personal Details (There are 12 questions in this section)

F1. What is your gender?
☐ Male
☐ Female

F2. How old are you?
☐ Below 18
☐ 18 - 21
☐ 22 - 25
☐ 26 - 29
☐ Above 30

F3. Which country are you from?

F4. How long have you been in Malaysia? (Please indicate the duration in months)

F5. Which education institution are you currently attending?

F6. How long have you been attending this education institution? (Please indicate the duration in months)

F7. At which level are you studying?
☐ Postgraduate Degree
☐ Bachelor Degree
☐ Diploma
☐ Others (Please Specify) _____

F8. Year of study in your current programme
☐ First Year
☐ Second Year
☐ Third Year
☐ Fourth Year
☐ Others (Please Specify) _____

F9. Which faculty do you belong?

F10. What is your major of study?

F11. How do you get financial support?
☐ Parents
☐ Personal
☐ Company sponsored
☐ Scholarship
☐ Other (Please Specify) _____

F12. What is your family household income per month (USD)?
☐ Less than \$25,000
☐ \$25,001 - \$50,000
☐ \$50,001 - \$75,000
☐ \$75,001 - \$100,000
☐ Above \$100,001

Thank you for your time spent taking this survey.

APPENDIX B

Questionnaire Survey Codebook

Variable Name	SPSS Name	Variable Coding Instructions
Case number	case	number assigned to each questionnaire
Gender	gender	0 = male 1 = female
Age	age	1 = below 18 2 = 18–21 3 = 22–25 4 = 26–29 5 = above 30
HEI types	HEI types	1 = Private University 2 = University College 3 = Foreign University Branch Campus 4 = Private College
Level of studies	level	1 = Postgraduate 2 = Bachelor 3 = Diploma 4 = Other
Year of study	year	1 = first year 2 = second year 3 = third year

		4 = fourth year
		5 = other
Source of financial support	financial	1 = parents 2 = personal 3 = company sponsored 4 = scholarship 5 = other
Household income	income	1 = less than 25,000 2 = 25,001–50,000 3 = 50,001–75,000 4 = 75,001–100,000 5 = above 100,001
Factors influencing the decision to study abroad	A1_1 to A1_24	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Malaysia is first choice	B1	0 = yes

		1 = no
Other countries considered	B2_1_US	0 = yes
	B2_2_UK	1 = no
	B2_3_Australia	
	B2_4_Singapore	
	B2_5_Other	
Host country related factors	B3_1 to B3_26	1 = strongly disagree
		2 = disagree
		3 = somewhat disagree
		4 = neither agree nor disagree
		5 = somewhat agree
		6 = agree
		7 = strongly agree
Current HEI is first choice	C1	0 = yes
		1 = no
Institutional related factors	C3_1 to C3_32	1 = strongly disagree
		2 = disagree
		3 = somewhat disagree
		4 = neither agree nor disagree
		5 = somewhat agree

		6 = agree
		7 = strongly agree
Choices and decisions made	D1_1 to D1_4	1 = Myself 2 = Parents 3 = Joint 4 = Others
Information about Malaysia, Current HEI and current course	D2_1 to D2_3	1 = extremely uninformed 2 = moderately uninformed 3 = slightly uninformed 4 = appropriately informed 5 = moderately informed 6 = well informed 7 = perfectly informed
Information source	D3_1 to D3_7	0 = NA 1 = not at all important 2 = low importance 3 = slightly important 4 = neutral 5 = moderately important 6 = very important

		7 = extremely important
Knowledge about Malaysia	D4_1 to D4_9	1 = strongly disagree
Knowledge about Private HEI in Malaysia	D5_1 to D5_8	2 = disagree
		3 = somewhat disagree
		4 = neither agree nor disagree
		5 = somewhat agree
		6 = agree
		7 = strongly agree
Overall satisfaction	E1_1 to E1_6	1 = completely dissatisfied
		2 = mostly dissatisfied
		3 = somewhat dissatisfied
		4 = neither satisfied nor dissatisfied
		5 = somewhat satisfied
		6 = mostly satisfied
		7 = completely satisfied
Satisfaction towards Malaysia as a study destination	E2_1 to E2_11	1 = completely dissatisfied
		2 = mostly dissatisfied
		3 = somewhat dissatisfied
		4 = neither satisfied nor dissatisfied
		5 = somewhat satisfied

		6 = mostly satisfied
		7 = completely satisfied
Satisfaction towards current HEI	E3_1 to E3_22	1 = completely dissatisfied
		2 = mostly dissatisfied
		3 = somewhat dissatisfied
		4 = neither satisfied nor dissatisfied
		5 = somewhat satisfied
		6 = mostly satisfied
		7 = completely satisfied
Future behavioural intention	E4_1 to E4_5	1 = strongly disagree
		2 = disagree
		3 = somewhat disagree
		4 = neither agree nor disagree
		5 = somewhat agree
		6 = agree
		7 = strongly agree

APPENDIX C

Exploratory factor analyses results

Appendix C1: Adequacy Test for EFA Analyses

EFA results (performed using principal axis factoring with direct-oblimin rotation method)

Push-pull factors used: 15 constructs with eigenvalue greater than 1 were extracted with 60% total variance explained.

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	15.309	22.513	22.513	14.924	21.947	21.947	8.717
2	5.267	7.745	30.258	4.900	7.205	29.152	4.822
3	5.224	7.682	37.941	4.857	7.142	36.294	5.768
4	3.986	5.862	43.803	3.589	5.278	41.572	3.635
5	2.548	3.746	47.549	2.140	3.147	44.719	6.651
6	2.052	3.018	50.568	1.657	2.437	47.157	5.018
7	1.801	2.649	53.216	1.406	2.067	49.224	5.800
8	1.634	2.403	55.620	1.227	1.805	51.029	8.241
9	1.545	2.273	57.892	1.126	1.656	52.685	4.258
10	1.452	2.135	60.028	1.039	1.528	54.213	6.690
11	1.307	1.923	61.950	0.906	1.332	55.545	3.139
12	1.297	1.907	63.857	0.850	1.250	56.795	3.652
13	1.118	1.645	65.502	0.751	1.105	57.900	3.205
14	1.093	1.608	67.110	0.712	1.047	58.947	3.505
15	1.070	1.573	68.683	0.663	0.975	59.922	1.222

Satisfaction attributes: 8 constructs with eigenvalue greater than 1 were extracted with 64.5% total variance explained.

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	15.522	41.951	41.951	15.184	41.038	41.038	9.860
2	2.332	6.304	48.255	1.979	5.350	46.387	5.863
3	2.072	5.599	53.854	1.740	4.703	51.090	6.529
4	1.610	4.352	58.205	1.264	3.416	54.507	4.954
5	1.375	3.717	61.923	1.047	2.829	57.336	10.388
6	1.312	3.545	65.468	0.968	2.615	59.951	7.189
7	1.216	3.287	68.755	0.896	2.422	62.373	4.948
8	1.096	2.961	71.717	0.774	2.091	64.464	9.575

The two correlation matrix measures used to assess sampling accuracy were Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity.

Push-pull factors used: KMO = 0.908; $p < .05$

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.908
Bartlett's Test of Sphericity	Approx. Chi-Square	22481.765
	df	2278
	Sig.	0.000

Satisfaction Attributes: KMO = 0.938; $p < 0.05$

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.938
Bartlett's Test of Sphericity	Approx. Chi-Square	14807.654
	df	666
	Sig.	0.000

Appendix C2: Validity and Reliability Test for EFA Analyses

Validity Test

Convergent Validity: All items' loading amplitude on pattern matrix were above 0.3 in both EFA analyses.

Discriminant Validity: All constructs extracted were distinct. No cross loading or major correlations (correlations between factors did not exceed 0.7) in both EFA analyses.

Factor correlation matrix for push-pull factors used

Factor Correlation Matrix															
Factor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.000	.193	.101	.114	.326	.269	-.193	.477	-.125	-.382	-.177	-.098	-.066	-.287	-.084
2	.193	1.000	-.003	-.046	.105	.085	-.298	.074	-.042	-.195	-.065	.041	.358	-.053	-.092
3	.101	-.003	1.000	.028	.142	-.035	-.346	.239	-.198	-.110	.000	-.041	-.079	-.025	-.033
4	.114	-.046	.028	1.000	.061	.234	-.099	.063	-.273	-.330	-.212	-.201	.066	-.021	.108
5	.326	.105	.142	.061	1.000	.144	-.176	.427	-.190	-.249	-.194	-.306	-.024	-.212	-.017
6	.269	.085	-.035	.234	.144	1.000	-.124	.152	-.174	-.306	-.312	-.252	.081	-.255	.103
7	-.193	-.298	-.346	-.099	-.176	-.124	1.000	-.220	.153	.220	.040	.122	-.205	.096	.082
8	.477	.074	.239	.063	.427	.152	-.220	1.000	-.164	-.277	-.160	-.230	-.099	-.201	-.035
9	-.125	-.042	-.198	-.273	-.190	-.174	.153	-.164	1.000	.313	.119	.206	-.048	.107	-.039
10	-.382	-.195	-.110	-.330	-.249	-.306	.220	-.277	.313	1.000	.206	.147	-.005	.119	-.061
11	-.177	-.065	.000	-.212	-.194	-.312	.040	-.160	.119	.206	1.000	.197	-.041	.094	-.038
12	-.098	.041	-.041	-.201	-.306	-.252	.122	-.230	.206	.147	.197	1.000	-.078	.141	.009
13	-.066	.358	-.079	.066	-.024	.081	-.205	-.099	-.048	-.005	-.041	-.078	1.000	.008	-.005
14	-.287	-.053	-.025	-.021	-.212	-.255	.096	-.201	.107	.119	.094	.141	.008	1.000	-.035
15	-.084	-.092	-.033	.108	-.017	.103	.082	-.035	-.039	-.061	-.038	.009	-.005	-.035	1.000

Factor correlation matrix for satisfaction attributes

Factor Correlation Matrix								
Factor	1	2	3	4	5	6	7	8
1	1.000	.300	.380	.282	-.606	.497	-.276	.515
2	.300	1.000	.368	.236	-.297	.310	-.343	.369
3	.380	.368	1.000	.220	-.453	.351	-.307	.338
4	.282	.236	.220	1.000	-.337	.194	-.330	.397
5	-.606	-.297	-.453	-.337	1.000	-.500	.370	-.513
6	.497	.310	.351	.194	-.500	1.000	-.255	.361
7	-.276	-.343	-.307	-.330	.370	-.255	1.000	-.275
8	.515	.369	.338	.397	-.513	.361	-.275	1.000

Reliability Test

Cronbach's alpha of all push-pull constructs were above 0.7.

Cronbach's Alpha	0.92	0.90	0.90	0.76	0.84	0.81	0.84	0.88	0.75	0.85	0.74	0.72	0.84	0.86	0.80
------------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Similarly, Cronbach's alpha of all satisfaction attributes constructs were above 0.7.

	1	2	3	4	5	6	7	8
Cronbach's Alpha	0.918	0.823	0.873	0.782	0.922	0.841	0.852	0.921