Verifying International Students’ Satisfaction Framework for the Development of MISS-Model in Malaysia

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ABSTRACT

A proposed framework to measure international students’ satisfaction on their learning and living in Malaysia was developed based on literature reviews on international students (Chong, 2015). The proposed framework has five domains in measuring factors influencing international students’ satisfaction, namely, academic internal environment, non-academic internal environment, external environment, image and perceived value. Each of these five domains has its own contributing variables or factors. This verification process is needed because the literature reviewed is limited in the context of Malaysia. Hence, an empirical study was conducted to verify the proposed framework by interviewing 20 international students from 14 nationalities at 11 private universities located in the Klang Valley, Malaysia. The transcribed scripts and notes taken during the interview were analysed. Based on the data collected from the interviews, two objectives of the research were met. Firstly, it has verified and confirmed factors in measuring international students’ satisfaction. Secondly, new variables were suggested by interviewees. The outcome of the research has contributed towards improvement of the proposed framework, thereby making it a more comprehensive model. This study and the proposed framework are useful to both the government and institutions of higher learning to improve their services. This will in turn help Malaysia to achieve its aspiration of becoming an international education hub.

Keywords: Education hub, internationalization of higher education, international student satisfaction
INTRODUCTION

International student mobility has always been the focus for internationalisation of higher education by many institutions and countries. It has been forecast by the International Development Programmes in Australia that the global demand for international education would reach approximately 7.2 million students by 2025 (Australia Education International [AEI], 2012). The market will require an average of 4% annual growth from 2014 with five million students who study abroad to reach 7.2 million students by 2025 (International Consultants for Education and Fairs Monitor [ICEF Monitor], 2015). This growth is intensified due to the emerging upper-middle-income countries such as China, Brazil, Mexico and Turkey. Sending countries from these upper-middle-income economies have recorded a significant increase of 161 percent between 2000 and 2012 (World Education News and Reviews, 2015).

International education has marked a major contribution to international exports (Radulovich, 2008). Countries and institutions have gained much economically from student mobility. According to the Australian Bureau of Statistics, in 2014 to 2015, the export of international education was at AUD$18.8 billion, making it the third largest export and the largest service export in Australia (Australian Government, 2015). Meanwhile, in the United States (U.S.), which is the largest international education exporter, international students contributed US$30.5 billion in 2015 according to the U.S. Department of Commerce (Institute of International Education, 2016). As the second largest exporter, the United Kingdom (U.K.), about £$10.2 billion income from education export was garnered for 2011-2012 (Department for Business, Innovation and Skills, 2013). Malaysia as the emerging contender in the education market has benefited from education export with income generated at RM2.6 million in 2010 (Ministry of Higher Education [MoHE], 2011a).

Besides the economic motivation in the recruitment of international students, university branding and reputation is also one of the contributing factors. Universities strive to elevate their brand through university ranking. This is because the number of international students enrolled is one of the criteria in many university ranking systems, for example Times Higher Education World University Rankings, and QS World University Rankings. By hosting more international students, the ranking of a university can improve.

These two major motivations have made international student recruitment an important strategic agenda for countries and higher education institutions, especially as the international education market is getting more diversified and competitive. For instance, in the case of the US, although it is still the largest host country, its market share fell from 23% in 2000 to 17% in 2011 (ICEF Monitor, 2015). In order to attract and retain international students, the country and/or institution will need to provide conducive and quality learning and
living environment to eventually satisfy international students’ total experience at the host country. Therefore, understanding the factors that influence international students’ satisfaction is crucial for a country that aspires to be an education hub.

Hence, a proposed framework in measuring international students’ satisfaction was developed (Chong, 2015) based on the review of literature. The proposed framework has identified five domains that influence international students’ satisfaction, namely: (a) academic internal environment, (b) non-academic internal environment, (c) external environment, (d) image and (e) perceived value. The development of the framework will be discussed further in the paper.

The objectives of this paper are to verify the proposed framework on factors influencing international students’ satisfaction and to identify new variables that may influence international students’ satisfaction in Malaysia. The subsequent writing is organised into justification of the study, significance of the study, review of literature, methodology, findings and discussion, limitations, recommendations, and conclusion.

Justification

This study serves as part of a bigger research on the development of Malaysia International Students’ Satisfaction Model (MISS-Model) proposed by the researchers. The process of the development of MISS-Model encompasses the review of literature, proposed framework, development of a survey instrument, data collection via questionnaire, data analysis and modelling of MISS-Model. This study aims to verify the proposed model, which is the third stage in the development of MISS-Model.

The verification of the proposed framework is required because of limited literature in the context of Malaysia. Of the 42 primary sources of literature on international students which were reviewed, half of these were based on Malaysian literature and only two empirical studies were found to directly measure the factors influencing international students’ satisfaction. In comparison, more studies on international students and student satisfaction have been conducted in Australia, the United Kingdom and the United States. By verifying the factors empirically, the validity and reliability of the factors identified in literature can be increased.

Significance of the Study

The finding from this study will contribute to the body of knowledge in confirming and identifying factors that influence international students’ satisfaction in Malaysia. More importantly, as Malaysia aspires to be an international education hub, the Ministry of Higher Education (MoHE) has set a target to attract 200,000 international students by 2020 (MoHE, 2007). In achieving this, it is imperative to identify the key factors that influence satisfaction of international students. Data collected from this research will serve as input to construct a survey instrument
contributing to the development of MISS-Model. This model will be used to measure international students’ satisfaction at national or institutional level in the future. The outcome of the larger study, which is the development of MISS-Model will be used to recommend new policies and strategies to attract international students. This will contribute towards enhancing inflows of international students to attain the education hub vision of the country.

**Internationalisation of Higher Education in Malaysia**

Internationalisation effort of higher education in Malaysia started back in the 1980s where its focus was on Transnational Education (TNE). Many franchises or joint degree programmes were offered by newly established private colleges in Malaysia with their partner universities abroad (Tan, 2002; Tham, 2013). The offer was more for meeting the demand of local market between the 1980s and 1990s. During this period, more local students were enrolled in these colleges compared to international students (Tan, 2002).

The demand from international students increased after 2001, possibly as an after-effect of September 11. Many students from gulf countries have diverted their study destination from Western countries to Asian countries. Table 1 shows the growth in international student enrolment. Within the span of 15 years, from 2001 to 2015, the total number of international student enrolment increased dramatically from 18,242 to 122,034.

### Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Public HEI</th>
<th>Private HEI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>4,770</td>
<td>13,472</td>
<td>18,242</td>
</tr>
<tr>
<td>2002</td>
<td>5,045</td>
<td>22,827</td>
<td>27,872</td>
</tr>
<tr>
<td>2003</td>
<td>5,239</td>
<td>25,158</td>
<td>30,397</td>
</tr>
<tr>
<td>2004</td>
<td>5,735</td>
<td>25,939</td>
<td>31,674</td>
</tr>
<tr>
<td>2005</td>
<td>6,622</td>
<td>33,903</td>
<td>40,525</td>
</tr>
<tr>
<td>2006</td>
<td>7,941</td>
<td>36,449</td>
<td>44,390</td>
</tr>
<tr>
<td>2007</td>
<td>14,324</td>
<td>33,604</td>
<td>47,928</td>
</tr>
<tr>
<td>2008</td>
<td>18,485</td>
<td>50,679</td>
<td>69,164</td>
</tr>
<tr>
<td>2009</td>
<td>22,456</td>
<td>58,294</td>
<td>80,750</td>
</tr>
<tr>
<td>2010</td>
<td>24,214</td>
<td>62,705</td>
<td>86,919</td>
</tr>
<tr>
<td>2011</td>
<td>25,855</td>
<td>45,246</td>
<td>71,101</td>
</tr>
<tr>
<td>2012</td>
<td>26,232</td>
<td>57,306</td>
<td>83,538</td>
</tr>
<tr>
<td>2013</td>
<td>28,826</td>
<td>52,598</td>
<td>81,424</td>
</tr>
<tr>
<td>2014</td>
<td>32,842</td>
<td>74,996</td>
<td>107,838</td>
</tr>
<tr>
<td>2015</td>
<td>33,369</td>
<td>88,665</td>
<td>122,034</td>
</tr>
<tr>
<td>Total</td>
<td>261,955</td>
<td>681,841</td>
<td>943,796</td>
</tr>
</tbody>
</table>

| %   | 28%        | 72%        | 100%   |


However, the country has failed to meet the target of 150,000 international students for 2015. Even though there is an increase in the total number of international student enrolment, Malaysia should not underestimate the threat from emerging contenders, for example Singapore Global Schoolhouse, Hong Kong Regional Education Hub and a few others in the gulf countries, namely Dubai International Education City and Qatar Education City (Knight & Morshidi, 2011). Therefore, in order to stay competitive in the international higher education market, Malaysia needs to improve its pull factors in attracting international students to the country.
by understanding the determinants of satisfaction among international students.

**International Students’ Satisfaction**

In studies on student satisfaction, many researchers take the role of students as customers (Arambewela, 2003). This is the notion that students pay for their fee and expect to receive services that meet their expectations. As in any business including higher education, satisfying customers is pertinent for business growth. When customers are satisfied, they will create many positive effects, such as positive word-of-mouth, being loyal and become a returned customer (Jamal & Naser, 2002). Similarly, in the case of international students, if they are satisfied with living and studying in the host country, they too will generate positive ripple effects, such as promoting and recommending the study destination and institution to relatives and friends. They may also be returning to the same country and/or institution to further their postgraduate studies (Arambewela, 2003; Arambewela & Hall 2006; Slethaug & Manjula, 2012).

**The Development of International Students’ Satisfaction Framework**

The development of international students’ satisfaction framework involved a few processes. Firstly, an extensive review of literature on international students was conducted. A total of 42 primary sources of literature and 32 secondary sources were reviewed to identify factors that influence international students’ satisfaction (Chong, 2015). The vast reading was derived from five major themes of literature: (a) choice of study destination, (b) international students’ experience and expectations, (c), challenges, problems and adjustment faced by international students, (d) perspective on service quality and (e) factors that influence both local and international students’ satisfaction.

The second process in developing the framework was the review of literature on customer satisfaction. Based on the review, factors that evaluate customer satisfaction comprise customer expectation, perceived quality, perceived value and image (Grigoroudis & Siskos, 2004; Turkyilmaz & Ozkan, 2007). This review of literature is important in the development of the framework because in this study, students are treated as customers, although they assume more roles than just customers, which are not discussed in this paper.

A database of variables was recorded in an excel spreadsheet, and factors were then mapped to variables and finally to domains. The outcome from this mapping was a proposed framework on factors influencing international students’ satisfaction (refer to Figure 1). The proposed framework captures five broad domains which include (a) academic internal environment, (b) non-academic internal environment, (c) external environment, (d) image, and (e) perceived value. The categorisation of domains was derived from theory of international student satisfaction and customer satisfaction. Each of the domains has variables to capture
factors that influence satisfaction. There were 39 variables, with 11 variables from academic internal environment domain, 11 variables from non-academic internal environment domain, 13 variables from external environment domain, two variables each for image and perceived value.

**Figure 1.** Proposed framework of factors influencing international students’ satisfaction

Internal environment comprises two areas which are academic environment and non-academic environment (Bianchi & Drennan, 2011). Internal academic environment domain covers all educational services. It refers to teaching quality, study programme, teaching staff and method of instruction, engagement of teachers with students, academic performance of the students, industrial training, and other services and facilities related to teaching and learning, for example, computer laboratories and library facilities (Arambewela & Hall, 2006; Bianchi & Drennan, 2011; DeShields, Kara, & Kaynak, 2005; Douglas, McClelland, & Davies, 2008).

The internal non-academic environment domain includes other support services within the campus that are non-academic related, for example accommodation, security, student services, student clubs and society, orientation, transportation, gym, and attractive campus with shops (Arambewela & Hall, 2006; Bianchi & Drennan, 2011; Douglas et al., 2008; Mavondo, Tsarenko & Gabbott, 2004). The non-academic services form part of the overall student satisfaction as they utilise these services while on campus.

External environment includes the social and physical dimension outside the university campus (Arambewela & Hall,
2011). The notion that external environment plays a vital role in a student’s satisfaction hinges on the time spent; it is almost one third outside the campus vicinity integrating into the host country’s community. They take the forms of social relationship such as friendship patterns, discrimination, housing and accommodation, beautiful touristic attractions and good weather, and well organised and safe city with good customer service, transportation and medical services, experiencing a new culture, food and language, feeling welcomed and accepted by local people (Bianchi & Drennan, 2011). All these contribute to the entire experience and will impact the overall international students’ satisfaction.

Image and reputation of a country and institution is a strong determinant of student satisfaction. Image refers to the brand name that adds prestige to the students through the international recognition of their degrees at home. Temizer and Turkyilmaz (2012) found that image has a positive effect on student satisfaction and loyalty.

Perceived value is the “perceived level of service quality relative to the price paid by students” (Temizer & Turkyilmaz, 2012 p. 3804). Variables in this domain include tuition fee and total cost of living at the host country.

METHODS

Variables identified from the literature are secondary data. To verify the framework, the researchers opted for interview to collect primary data because interviewing is sometimes the only way to get data from source (Merriam, 2009). Hence, a one-to-one interview with international students in Malaysia was the direct source of data to verify the framework. The methodology and data collection is discussed in detail in the following paragraphs.

Sample Size

The determination of the total number of interviewees was based on past research of similar nature by following researchers such as Arambewela (2003); Clemes, Gan and Kao (2008); LeBlanc and Nguyen (1999). These researchers interviewed students within the range of 11 to 16 interviewees. The 20 interviewees in this study is a justified number as compared to previous researchers who had a maximum of 16 international students to interview.

Selection of Sample

In this study, undergraduate international students who have enrolled at private universities were selected as samples because more than 70% of international students (refer to Table 1) were enrolled to study at private higher education institutions (PrHEI). Based on the data of enrolment of international students from 2008 to 2013 (Department of Higher Education, Ministry of Education Malaysia), 48% of international students were pursuing their bachelor degree. Thus, the samples for this study were undergraduate international students from second, third or final year
because they had longer experience in the learning and living environment compared to first year students (Mavondo et al., 2004).

**Data Collection**

The interviewees were reached through recommendations of personal contacts from different institutions and referrals from other international students. Invitations to prospective interviewees were sent either through email or telephone short message services (sms). Once the interviewee agreed to participate, a consent form was given to accept the terms and conditions that entailed the study. Semi-structured interview questions were asked, and the interview process was audio recorded. A total of 20 international students from 11 private universities located in the Klang Valley were interviewed. The majority of interviews were conducted at the respective campus with a few at shopping malls. Each interview lasted 60 to 90 minutes. The transcriptions of the interview were given to interviewees to verify. The interviews were conducted for the duration of six months, from November 2014 to April 2015.

**Profile of Interviewees**

The 20 international students who were interviewed came from 14 different countries. They were between the age of 18 and 34. About 60 percent of the interviewees were males and 40 percent were females. All of them were single except two male students. Half the students were enrolled in science, technology, engineering, and mathematics (STEM) programmes, while the rest were enrolled in social sciences and humanities programmes. All were self-funded to study in Malaysia except one student who was on government scholarship. The interviewees were of diverse religious backgrounds including Islam, Buddhism, Hinduism and Christianity. They stayed in areas such as Kajang, Pusat Bandar Damansara, Petaling Jaya, Cheras, Cyberjaya, Subang Jaya, Puchong and Kota Damansara, which are all near their campuses.

**ANALYSIS OF DATA**

The transcribed scripts and notes taken during the interviews were analysed. Similar words or meanings identified were grouped into factors according to the domains. An excel file database was created to record the factors according to the five domains: (a) academic internal environment, (b) non-academic internal environment, (c) external environment, (d) image, and (e) perceived value. Subsequently, comments from interviewees were grouped into respective factors (refer to excerpt in Figure 2). Table 2 shows examples of comments from interviewees according to domains.
Verifying International Students’ Satisfaction Framework

FINDINGS

At the end of the interview, interviewees were given the opportunity to view the proposed framework and to confirm and suggest other factors that might influence their satisfaction. All interviewees confirmed all the variables that would influence their satisfaction. All variables confirmed by the interviewees were captured in the proposed framework (refer to Figure 1). The following are additional variables suggested by interviewees and are presented in this report according to domains.

**Academic Internal Environment**

There are three additional factors and sub-factors suggested by the interviewees:

<table>
<thead>
<tr>
<th>A. AcaIntEnv</th>
<th>A1 Course Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Course content - OK, enjoy some elective subjects</td>
</tr>
<tr>
<td>P2</td>
<td>Course content- quality of education-international course content</td>
</tr>
<tr>
<td>P4</td>
<td>Course content - good &amp; international, use international textbook</td>
</tr>
<tr>
<td>P5</td>
<td>Course content - lecturer cover 100% syllabus</td>
</tr>
<tr>
<td>P6</td>
<td>Course content - academic very good. UK standard</td>
</tr>
<tr>
<td>P7</td>
<td>Course content - subjects are interesting</td>
</tr>
<tr>
<td>P8</td>
<td>Course content - affiliation with Lancaster University, UK.</td>
</tr>
<tr>
<td>P9</td>
<td>Course content - is good but can be improved</td>
</tr>
<tr>
<td>P10</td>
<td>Course content - 80% happy; some content seems not relevant, repeating</td>
</tr>
<tr>
<td>P12</td>
<td>Course content - good learning experience, media law - understand Malaysia media law.</td>
</tr>
<tr>
<td>P17</td>
<td>Course content - as what I expected, I only expect lecturer to give me guidance. I only rely 50% from university and 50% from own self.</td>
</tr>
<tr>
<td>P18</td>
<td>Course content - university teaches simple thing (basic), we need to improve (learn more) by ourselves.</td>
</tr>
<tr>
<td>P20</td>
<td>Course content - not strong, simpler than high school.</td>
</tr>
</tbody>
</table>

*Figure 2. Example of comments from interviewees in factors*

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**English as Medium of Instruction**

Interviewees highlighted that some lecturers used Malay language in the class. Interviewees P1, P4 and P5 responded that some lecturers taught in English. However, they had Malaysian accent that made it difficult for foreign students to understand.

**Sub-Factor for Lecturer: Diversity of Lecturers**

Interestingly, interviewee P7 believed that having more lecturers from diverse nationalities may help to give international exposure to her learning experience. This is under the sub-sector of the factor “lecturer” in the original proposed model.
Sub-Factor for Delivery of Lesson: Industrial Visit

The method of delivery is also important as learning is not merely confined to the classroom setting. Interviewee P18 expressed hope that lecturers would organise industrial visits as part of the learning experience. This is an addition to the sub-factor in the delivery of lesson.

Non-Academic Internal Environment

Through these interviews, interviewees offered invaluable input on the factors that influence their satisfaction under the non-academic internal environment domain. These include location of campus, diversity of student population and physical building on campus.

Location of Campus

Interviewees P11 and P17 viewed location of campus as an important factor influencing their satisfaction. P11 highlighted that the campus is convenient and it is near the airport. Meanwhile, interviewee P17 equated the location of his campus, which is in the state of Selangor, to be in the heart of Malaysia – a location where he can easily connect with his activities and enables him to meet the needs of his family. P9 shared that the location of his campus is good. He enjoyed both the quietness of living in places like Cheras and the happenings in Kuala Lumpur city centre and Mid Valley shopping mall.

Diversity of Student Population

One of the reasons some international students chose to leave their country to study abroad was to gain international experience (Mazzarol & Soutar, 2002). Interviewee P5 highlighted that he would prefer to study in an institution that has more international student population where he can socialise with people from various nationalities and this will definitely enhance his study and living experience abroad. Meanwhile, P15 voiced out that diversity of student population on campus is important particularly in clubs and societies, where one can get acquainted with people of different nationalities and benefit for one’s personal development.

Physical Building

Interviewee P20 indicated that his institution was operating in office buildings, which did not have the infrastructure to operate as a university. He further commented that it is important to experience the physical learning environment as a “university environment.”

External Environment

There are many additional factors suggested by interviewees that fall under the external environment domain. This is not surprising as students spend almost 30 percent of their time outside the campus environment (Arambewela & Hall, 2011).
Places of Worship / Practice of Religion

Interviewees of different religions, P1, P16, P17 and P19 who are Muslims, P4 a Christian and P7 a Hindu highlighted that it is easy for them to participate and practice their religions in Malaysia. They are able to find their respective house of worship, that is, mosque, temple and church. In particular, Muslim students mentioned that the environment in Malaysia has made it easy for them to live as Muslims, for example in the month of Ramadhan, they have easy access to places to pray like surau, halal food and other consumables. However, P7 did highlight that vegetarian food is difficult to find.

Public Transportation

Malaysia has many places of attraction, however, the lack of public transport to these places has made it difficult for participant P4 to visit these places. Thus far, she had been able to only visit places of attraction if driven by her local friends. If the public transport system improved, it would increase her mobility in visiting more places of attraction in Malaysia.

A pertinent factor in public transport is the taxi service in Malaysia. Interviewees P5, P6, P7, P8, P11, P14, P16 and P18 revealed that they had bad experiences during their taxi rides. Among the problems encountered included over charging by taxi drivers and non-usage of the meter.

On the other hand, P9 is happy with the taxi services in Malaysia. For him, taxis in Malaysia are clean and cheap. He related an incident when once, a taxi driver returned his friend’s hand phone that had been left in the taxi.

Places of Attraction

As found by other researchers (Koe & Saring, 2012; Mazzarol & Soutar, 2002), places of attraction is one of the factors when choosing a study destination. This study confirms this finding. P2, P5 and P7 highlighted that they like the greenery found in Malaysia and P1 found Malaysia to be a beautiful country. P11 who came from a hot desert climate really enjoyed the cool breeze of the highlands in Malaysia, and has visited Genting Highlands and Cameron Highlands with his family.

P4 said she hopes to visit places of attraction while staying and studying in a country. She commented that some of her contemporaries from her home country choose a particular destination of study based on the attractions of the host country. P18 added that he would be happy if the institution could plan and arrange visits to tourist destinations in Malaysia. Thus, the findings reveal that places of attraction in a country will also affect the overall satisfaction of international students.

Government-to-Government Relationship (G2G)

P17 highlighted that G2G relationship would help to increase his satisfaction. He believed that when both governments are in good bilateral relationship, more opportunities would open up for both countries. For example, it will be good to increase the mobility of students for both countries. It
will make things easier for them to live in Malaysia. P4 mentioned that she would feel more secure when both governments are on bilateral terms.

**Accommodation**

Majority of the interviewees (14/19 = 74%) stayed out of campus. Many (P11, P12, P16, P18) found the rental outside the campus to be cheaper compared to staying on campus. Besides the cost, other reasons for staying out are they can cook (P2, P12, and P8) and have more freedom as they do not need to comply with rules imposed by the campus, for example, curfew hours. They also feel more at home and comfortable (P8, P18). Those with family such as P17 and P19 stated that staying outside campus was preferred as they could meet the needs of their family. P1 stated that some landlords charged higher rates to Africans and it is more difficult to rent if you are male international student. In response to that, P6 added that it is also more difficult to find a place to rent if you are black.

**Sub-Factor for Legal Framework**

Student visa issued by the Malaysian government allows international students to work part-time if certain conditions are complied with. One of the conditions is the student can only work during the semester break or term holidays that exceed seven days. Interviewees P5 and P10 raised their concern that if they were given the flexibility to work during the semester, it would highly improve degree of satisfaction.

**Image**

*University Ranking*

Aside from recognition of qualifications, whether in home country or worldwide, P9 strongly felt that the image of an institution is influenced by university ranking. He added that the university’s image could be alleviated if the institution shows effort in constant improvement.

**Perceived Value (PV)**

*Personal International Living Experience and Exposure*

The perceived value is not limited to the total cost of both tuition fees and cost of living against qualification obtained. In fact, some interviewees believed that their satisfaction lies in their experience living abroad. For example, P1 is happy to experience living abroad and to have insights into Malaysia. While P5, P8, P9 and P19 experienced multi-cultural and diversity of the Malaysian society, which added to their personal development gained through international experience.

**Description of Factors**

Besides verifying the factors and new factors identified during the interview, interviewees also contributed significantly to the description of some factors. These descriptors will be used as part of the input to construct survey questionnaire for the subsequent research work, the development of MISS-Model. Table 2 is an example of descriptors for one factor in each domain.
The findings from this study have provided valuable input to improve the proposed framework of factors influencing international students’ satisfaction. The improved framework has the five domains with a total of 58 variables compared to 39 variables in the initial framework. A total of 19 new variables were suggested by interviewees. Figure 3 is the improved proposed framework of factors influencing international students’ satisfaction in cooperating with the 19 new variables.

![Figure 3. Improved proposed framework of factors influencing international students’ satisfaction](image-url)
Validity of Factors
Member check technique was used to validate the data. A total of 10 international students from a private university were invited to validate the factors. It was conducted between July and August 2015 as part of a pre-test process before pilot study of subsequent research using a survey questionnaire. It was part of the MISS-Model development process.

LIMITATIONS AND RECOMMENDATIONS
All the interviews were conducted in the Klang Valley. Hence, the findings on external environment domain may be similar. The majority of the samples are staying in urban communities, therefore, the society and infrastructure have almost identical environments. It would be interesting to also extend the interview with international students who study in campuses located in a smaller city.

It is recommended that the factors verified and identified, together with the descriptors from each factor be used in the development of survey instrument. This approach is consistent with many other similar research endeavours on students’ satisfaction (Aldridge & Rowley, 1998; Arambewela, 2003; Brown & Mazzarol, 2009; Clemes, Gan, & Kao, 2008; LeBlanc & Nguyen, 1999; Sadiq & Mohammad, 2003; Siti, Abdul, & Rohaizat, 2010).

This improved framework needs to be tested statistically. Hence, a larger scale survey can be conducted to gather more feedback from the population. With a larger sample, the survey may explore the relationships among the domains and factors that influence international students’ satisfaction.

CONCLUSION
This study has confirmed the initial proposed framework of factors influencing international students’ satisfaction and in addition, has found new influencing factors in all the five domains. Among the additional factors are diversity of lecturers and student population, location of campus, practice of religion, public transport, places of attraction, G2G relationship, university ranking and others. With that, the framework has been improved and revised to reflect a more comprehensive framework based on the context of Malaysia. This framework provides important input for the development and modelling of MISS-Model.

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