HOW SATISFIED ARE INTERNATIONAL STUDENTS IN MALAYSIA'S PUBLIC UNIVERSITIES? AN EMPIRICAL STUDY ON STUDENT ACCOMMODATION FACILITIES

*Abdulmalik Adozuka Aliu[1], Nor Rima Muhamad Ariff[1]**

[1]Faculty of Architecture, Planning & Surveying
Universiti Teknologi MARA Shah Alam Campus,
40450 Shah Alam, Selangor, Malaysia

*Corresponding author's email: 2016908755@isiswa.uitm.edu.my

Abstract

The importance of student accommodation on the academic performance of students have been widely recognised. As a result of the rise in global demand for international education, student accommodation have met with new issues such as inadequate accommodation facilities. Hence the need to enhance student satisfaction with accommodation facilities arises in order to attract international students into the universities. Also, whilst some studies have been carried out on student accommodation, there have been little empirical investigation into student accommodation satisfaction with regards to international students, particularly in Malaysia. The paper explores the satisfaction of international students with accommodation facilities. Data was retrieved through a self-administered questionnaire from 253 respondents in three selected public universities in Malaysia. The data which comprises of satisfaction dimensions that includes accommodation unit, support services and social characteristics were subjected to descriptive statistical analysis. Generally, international students were satisfied with the provided accommodation facilities, but expressed a relatively low satisfaction level in items that includes; common and recreation room, pantry (kitchenette), and internet facility. A regression analysis further revealed that all satisfaction dimensions adopted for this study are significant in influencing overall satisfaction of international students with social characteristics the most important. This study points out the need for the provision of adequate and quality accommodation facilities which may serve as a tool for attracting more international students into universities in Malaysia and thereby increasing the reputation of Malaysia's universities to be among the top destinations for international students. This study has shed new insight into international students' perspective of accommodation facilities which will assist the relevant authority, management and facility managers in further improving facilities and services in the students' accommodation.

Keywords: Students' accommodation facilities, satisfaction, international students, Malaysia.

1.0 INTRODUCTION

The higher education industry in Malaysia has of late seen an inflow of foreign students in search of education in the country. Since 1996, the flow of international students has increased markedly due to several reforms initiated in the higher education sector to promote the entry of international students into the country's higher education institution (Sirat, 2008). In 2006, the higher education institutions in Malaysia enrolled around 55,000 international students which is a 2% share of the global international student market (Verbik & Lasanowski, 2007). The arrival of international students for higher education had

increased by 26% from 135,000 in 2016 to 170,068 in 2017 (Ministry of Higher Education, 2017). This growing popularity is due to the varieties of courses offered, safety of the country, value for money, cultural comfort (Jusoh, 2017; Sirat, 2008).

The higher education sector is currently a huge source of income for Malaysia's economy. According to the Malaysian Higher Education Minister, Datuk Seri Idris Jusoh, the present revenue of RM7.8 billion annually from international education is projected to rise to R15.6 billion by 2020 (Jusoh, 2017). Realizing this huge potential, Malaysia has been promoting actively its education to other countries in order to attract international students with the aim of placing the country as an educational hub in the region (Sirat, 2008). Aside from revenue generation, international education also strengthens the process of learning, teaching and research as well as the quality of academic programs in HEI's. (Ministry of Educatioion Malaysia, 2015). Based on this, target has been set by the Malaysian government to attract 250,000 foreign students by 2020 in its "*Malaysia Education Blueprint 2015-2025*". However, Malaysia's competitors in the region such as Singapore, China & India are all active in the development and promotion of the industry in Asia. With the rising rate of international education globally, the need arises for Malaysia to build up its competitive advantage as an educational service supplier.

Studies have shown in the education sector that among the factors that motivates students who choose to study abroad is the quality of accommodation provided by the institution. On this note, there is a rise in the demand for suitable housing by students, since academic excellence is also dependent on the quality of housing (Khozaei, Ayub, Ahmad, & Khozaei, 2010). Hence it is vital that universities considers such factors that influences the satisfaction of international students, rather than only educational matters, as international students expects that their accommodation should meet a minimum standard of comfort, cost, as well as availability (Arambewela & Hall, 2009). A crucial question that needs to be answered is, "How satisfied are international students with accommodation facilities in Malaysia presently?"

Student housing have become a major issue encountered by HEIs as a result of the rise in global enrolment of students in developing countries (Kotzé & Plessis, 2003). These issues that includes insufficient facilities, sanitation challenges and overcrowding, have led to finding a better approach for a comfortable and efficient condition (Spio-kwofie, Anyobodeh, & Abban, 2016). In addition, there is little published data on student housing facilities because most studies are focused on post-occupancy evaluation of public or private family residences (Amole, 2009; Najib, Yusof, & Abidin, 2011). Hence the need arises to investigate student housing facilities (Oke, Aigbavboa, & Raphiri, 2017), particularly with regards to international students in Malaysia. To the knowledge of the researcher, only Najib et al. (2011) investigated the student housing with three research universities in Malaysia where the population of international students used were only 2.2% of the total respondents. Investigating international students' satisfaction gives insight into the areas of strength and weakness of the country's university accommodations which may prompt appropriate measures in improving the current condition of the accommodation to increase the satisfaction of international students.

The objective of this research is to examine the satisfaction level of international students with student accommodation facilities in Malaysia's public universities. As the government of Malaysia is proactive in advancing international education to achieve its "*Malaysia Education Blueprint 2015-2025*" (Sirat, 2008), this study seek to offer a beneficial evaluation of how the universities' accommodation is performing in the eyes of international students themselves. This study also aims to contribute to the growing research on international student satisfaction in Malaysia; of which there remains a paucity of information in international education literature.

2.0 LITERATURE STUDY

2.1 International Education

International students have been defined by Organisation for Economic Co-operation and Development as individuals who have physically passed over an international border between two nations with the aim of taking part in educational functions in the destination country, where the destination country is different from their country of origin. It was further stated that 'the number of students enrolled in tertiary education outside their country of citizenship has sharply increased over the last decades, reflecting the expansion of tertiary education systems worldwide and the globalisation of economies and societies' (OECD, 2013). In the study conducted by Lynn (2013), he opined that international student contribute financially in several aspect and not just by the payment of tuition fees. These aspects include accommodation, food, travel, leisure activities, clothing etc. As Knight (2015) states: 'Internationalization of education is integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education'. Due to economic globalization and the rise of governments' consciousness of the perceived tie between economic competitiveness and education, many governments have injected billions of dollars for the increase in the higher education institutions and enhancing enrolment of students. The rising demand as well as the financial strength of the developing middle class has successively driven the trend for students' choice of leaving their domicile countries in search of higher education abroad (Tan, 2013). According to Lynn (2013), higher education institutions, especially universities, have usually recommended international cooperation and free flow of students and ideas. Arambewela & Hall (2009) opined that one thing that has contributed to the growth of international higher education is the move by foreign institutions setting up off-shore campuses through subsidiaries and partnership arrangement, branch campuses and the provision of courses and qualification to students.

2.2 Student Housing Satisfaction

There is need to increase the satisfaction of students with housing facilities provided in order to enrol and keep students in the university (Najib, Yusof, & Sani, 2012). According to Hassanain (2013), well planned accommodation facilities will foster mutual interests and academic excellence. Therefore, the importance of sustainable university accommodation facilities in achieving the objective of enhancing students' academic performance shouldn't be undervalued. Hassanain (2013) conducted a study to evaluate the performance of student housing in a Saudi Arabian university. It was discovered that the students were satisfied with the identified technical and functional performance criteria. Nevertheless, the study was carried out in a climate and culture that is not similar with the Southeast Asian region. Hence the findings from the study may be inapplicable to the context of this study. A study was also conducted by Yewande et al. (2011) using the same technical and functional performance criteria used previously by Hassanain (2013) with other criteria (29 performance criteria) to assess satisfaction of students with the post-graduate hostel facilities in a Nigerian university. Findings from the study reveals that students are satisfied with cleanliness, lighting, temperature in the building, comfort level, natural ventilation, visual privacy, amount of space, conveniences, car parking, fire safety, security and air quality. However, the students expressed dissatisfaction in the maintenance of the facilities.

Another study by Najib et al. (2011) in some selected research universities in Malaysia examined the satisfaction level of student with the housing facilities. It was found that the students are generally satisfied with the housing facilities, showing a 74% level of satisfaction. The study further revealed that satisfied students will stay longer in their residents until they finish their studies. The implication is that housing departments should as a minimum, maintain the quality of the existing student housing facilities to continuously fulfil the students' needs. The study affirmed that the developed SRS index can act as a

benchmark for Malaysian institutions of higher learning in improving the student housing in order to attract more students. Fatemeh et al. (2010) explored the relationship between sense of attachment to place and satisfaction with hostel among undergraduate students of University Sains Malaysia. Aside from the students showing satisfactory response to different aspect of the hostel facilities, their results also revealed that there was a significant correlation between satisfaction with hostel and sense of attachment. The reason behind this is that the duration of stay, satisfaction with facilities and space also contributes in creating a sense of attachment to a place. Another finding of the study showed that there was no significant difference between various ethnicity on the sense of attachment to place. This suggests that attachment with the hostel is an emotional bond between students and the hostel and it is not affected by the culture or any ethnicity.

As stated in a study conducted by Ning & Chen (2016), residential satisfaction of university dormitories serves as an important aspects in the higher education framework of sustainability. The study sought to develop a framework for post occupancy evaluation at a Chinese university dormitory on the ground of technical and social approaches. It further identified the factors that contributes to the residential satisfaction of students through the use of a case study for the evaluation of post occupancy condition of the dormitories in the university. The results of the study revealed that the physical facilities in the university are of good quality, however, the students expressed their dissatisfaction with the social aspect of providing quality services and supporting infrastructure. This study has presented a socio-technical framework of post occupancy evaluation for university dormitories. This study was similar to the study conducted in Nigeria by Amole (2009) on student residential satisfaction to examine how satisfied students were with their student housing and the factors which predicted residential satisfaction. This study went further to examine if the morphological configurations of the halls of residence would predict residential satisfaction in selected residential universities in south-western Nigeria. Data were obtained on the physical, social and management attributes of the halls of residence whereby more than half of the respondents (53%) were not satisfied with the current condition of their residence. The morphological configuration of the halls of residence was seen to be a predictor of student satisfaction especially in the aspect of form and length of the corridor. Another vital finding of the study was that the bedroom satisfaction appeared to be the most critical. Overall, these studies highlight the need for more investigation towards students' accommodation.

2.3 Satisfaction Attributes in Student Accommodation

Previous researches have established several factors that influences the satisfaction of students with accommodation facilities (Najib et al., 2012). Satisfaction with student accommodation is determined by various aspects of the housing, for example, the housing in general which includes room space, available facilities, cleanliness and maintenance, quality of food, distance of the housing from main facilities in the campus, as well as security (Fatemeh et al., 2010). Celebi (2010) further opined that among these factors is the socio-physical backgrounds which are the demographic characteristics of a person such as ethnicity, economic status, gender etc. Hassanain (2013) categorized student housing facilities which can influence student satisfaction into technical and functional performance category. The TPC category consists of element such as thermal comfort, acoustical comfort, indoor air quality, and fire safety, while elements such as interior and exterior finish systems, room layout and furniture quality, support services, efficiency of circulation, proximity to other facilities on campus constitute the FPC.

According to Reeves & Roche (2010), the trend has now turned to the apartment and suite style housing, and what were initially thought to be luxuries in student accommodation like kitchens, private bedrooms, private bathrooms, social spaces and lounges, internet connectivity are now being anticipated by students. They further stressed that Laundry facilities, HVAC that can be controlled in each room, fitness facilities and common spaces to socialize and/or study are expected amenities of student in their housing. In the same study, it was pointed out that the factors that influences student satisfaction with housing facilities includes

private bedroom, onsite parking, double beds, onsite laundry facilities, internet access, proximity to campus, fitness centre, private bathroom, and cable TV. A survey was further conducted where students were asked to rate housing facilities that are import to their stay in the campus housing. Majority of respondents went for internet access, laundry facilities on premises, cable TV and kitchen as the most important. This indicates that all the listed facilities above have influence on student satisfaction.

Najib et al. (2011) argued that student actual experience are measured based on perceived satisfaction in attributes that includes; study-bedroom, washroom (e.g. toilet, bathroom and laundry), pantry (kitchenette), common & recreation room (e.g. Study room, Computer room, Television room, Meeting room, Prayer room, Lobby), and support services (e.g. Vehicles parking lot, Cafeteria, mini market and mini bookshop, ATM machine and public phone, CCTV surveillance system, Security guards, Lifts/stairs, electrical wiring, water supply, garbage disposal and fire safety). Sawyerr & Yusof (2013) further suggested that what makes up an overall satisfaction in student housing facilities are not only limited to physical characteristics as earlier mention by Najib et al. (2011), but a combination of the physical characteristics and social characteristics. For the social characteristics, it involves population using the facilities and the convenience of use.

In view of all that has been mentioned so far, one may suppose that HEIs have a pivotal role in attracting international students through several means such as student accommodation. The studies presented thus far clearly indicate that HEIs globally have encountered varying pertinent issues of student accommodation. This is evident in the studies conducted to investigate student satisfaction with accommodation facilities using various satisfaction dimensions. However, such studies remain narrow in focus dealing only with local students. Therefore this study adapts the satisfaction dimensions highlighted in the review with a focus on international students.

3.0 METHODS

3.1 Sample, Data collection and Analysis

This study was conducted in the form of a survey using the quantitative approach. A questionnaire was used to collect data from the respondents due to its suitability of obtaining large number of quantitative data (Sekaran & Bougie, 2016). The population sample for this study was defined as international students who have spent at least one semester in the university provided accommodation. Three public universities were selected for this study; International Islamic University Malaysia (IIUM), Universiti Putra Malaysia (UPM), and Universiti Teknologi MARA (UiTM) due to their high reputation and are currently attracting international students. The accommodation facilities and services provided by each of the university are homogeneous with respect to their types and services offered. The stratified random sampling was used select students from each of the universities. This guarantees that each group is represented in the sample fairly as there is a much suspected variability between each university in terms of the population size (Lind, Marchal, & Wathen, 2018). The questionnaires were then self-administered to respondents using a simple random sampling technique. From the 3,442 international student population residing in the university provided accommodation in the three selected universities, the target sample was set at 484 (Sekaran & Bougie, 2016). By the end of the survey, data had been collected from 253 individuals for further analysis, 143 of whom were from IIUM, 56 from UPM, and 46 from UiTM, making a total response rate was 52%.

The design of the questionnaires was based on the satisfaction item derived from the literature review. The questionnaire consists of two parts. Section A elicited information on the demographic profile of the respondents which includes institution of the respondent, age, gender, country of origin, duration of study, length of stay in their accommodation while section B consists of questions pertaining to the

accommodation unit (e.g., bedroom, washroom, common & recreation room), support services (safety and security, vehicle parking facility, internet facility, cafeteria) and social characteristics (e.g. convenience of using the facilities, Management). To measure the satisfaction of international student with the university provided accommodation, a five-point likert scale was adopted (Oke et al., 2017; Sawyerr & Yusof, 2013). Based on the satisfaction level, the scale ranges from 1 (strongly dissatisfied) to 5 (strongly satisfied). The rating scale is represented as follows; 1 = strongly dissatisfied, 2 = dissatisfied, 3 = slightly satisfied, 4 = satisfied, 5 = strongly satisfied.

Statistical analysis was performed using SPSS software (version 22). The demographic profile were presented using the descriptive statistics. In other to estimate the internal consistency and ascertain the reliability of the items in the questionnaire, the Cronbach's alpha coefficient was adopted. Generally, reliability coefficient of 0.7 and above are considered acceptable (Sekaran & Bougie, 2016). All Cronbach's alpha coefficient for the items in the questionnaire are above 0.7 which indicates a good internal consistency reliability of items used in this research. The mean score values were then computed to ascertain the satisfaction of international students for each item with their accommodation facilities. A one-way ANOVA analysis was also conducted to determine if there exist a difference in satisfaction between the students from each university, as well as a regression analysis to determine which of the satisfaction dimensions that most influences the overall satisfaction of international students.

4.0 RESULT AND DISCUSSION

4.1 Demographic Information

The characteristics of respondents give information on their gender, age, continent, level of study, and duration of stay in their accommodation as shown in Table 1. This is important as it gives a better understanding of the data retrieved.

Table 1. Demographic Profile of Respondents

Dimensions	Title	IIUM		UPM		UiTM		Total	
Variables	Levels	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Gender	Male	80	55.9	49	76.6	37	80.4	166	65.6
	Female	63	44.1	15	23.4	9	19.6	87	34.4
Age	18 – 24	83	58.0	18	28.1	13	28.3	114	45.1
	25 – 34	50	35.0	25	39.1	27	58.7	102	40.3
	35 – 44	9	6.3	16	25.0	5	10.9	30	11.9
	45 – 54	1	0.7	4	6.3	1	2.2	6	2.4
	55 & Above	0	0.0	1	1.6	0	0.0	1	0.4
Continent	Asia	84	58.7	28	43.8	32	69.6	144	56.9
	Africa	51	35.7	36	56.3	8	17.4	95	37.5
	Europe	8	5.6	0	0.0	6	13.0	14	5.5
Level of Study	Undergraduate	89	62.2	13	20.3	17	37.0	119	47.0
	Masters (C.W)	25	17.5	18	28.1	16	34.8	59	23.3
	Masters (R)	9	6.3	12	18.8	5	10.9	26	10.3
	PhD	20	14.0	21	32.8	8	17.4	49	19.4
Duration of Stay in accommodation	1 Semester	30	21.0	25	39.1	31	67.4	86	34.0
	2 Semesters	45	31.5	11	17.2	9	19.6	65	25.7
	3 Semesters +	68	47.6	28	43.8	6	13.1	102	40.3

It can be seen from the data in Table 1 that over half (65.6%) of the total respondents that participated in the study are male while female constitute 34.4%. UiTM had two-third of its respondent (80.4%) as male. This indicates that majority of international students who seek higher education in Malaysia are males and

this is corroborated with the findings of (Malaklolunthu & Selan, 2011). This may be because Males are more likely to leave their country and family for a certain period of time than the females. For the age category, majority of the total respondents (45.1%) were less than 25 years old and the age group 55 & above made the least number of respondents (0.4%), while majority of respondent from UiTM are within the age group of 25 – 34. With regards to the continent, international students from Asia made up over half (56.9%) of the total respondents, while international students from Europe constitutes the least respondents (5.5%). Asian international students also constitutes the majority of the respondents (69.6%) from UiTM. For the level of study, almost half of the total respondents (47.0%) are undergraduate while a few of the respondents (10.3%) are masters by research. The majority of respondents from IIUM (62.2%) are undergraduate. In terms of the duration of stay in accommodation, closer inspection of the table shows that respondents who have stayed 3 or more semesters represented the total majority (40.3%). This guarantees a more accurate view of the respondent with regards to their accommodation facilities.

4.2 Satisfaction with Accommodation Attributes

The descriptive statistics was conducted to measure the satisfaction level of international students with the accommodation facilities. The results of each item within the satisfaction dimensions are presented in the form of mean score in Table 2. International students are mostly satisfied with the study area (M = 3.49, SD = 0.88) in the context of the accommodation unit. In terms of support services, safety & security (M = 3.35, SD = 0.91) scores the highest mean, while convenience of use (M = 3.28, SD = 0.82) is the most satisfied item within the social characteristics context. Closer inspection of the table shows that the least satisfied items were common & recreation room (M = 2.93, SD = 0.92), pantry (M = 2.81, SD = 1.11), and internet facility (M = 2.68, SD = 1.06). These results reflect those of Najib et al. (2012) who also found that students were dissatisfied with pantry in three universities in Malaysia. The reason for this relatively low satisfaction mean score in this study could be as a result of the slow internet speed and limited coverage in some of the international students' accommodation, while for the pantry, this may be due to the lack of provision of kitchenette and equipment for the students in their accommodation. For the low satisfaction in the common & recreation room, a possible explanation for this might be due to the poor conditions of the facility. If we now turn to the overall satisfaction, results reveal a mean score of 3.29 (SD = 0.92).

Taken together, these results indicate that in general, international students in this study are averagely satisfied with the accommodation facilities in Malaysia. Moreover, the university management should take proactive measures in boosting the internet connectivity at the student accommodation in terms of speed, reliability and coverage as this will further ease their academic endeavour. This supports evidence from previous studies (e.g. Amole, 2009; Reeves & Roche, 2010), that internet further enhances the learning activities of students. In addition, providing an equipped pantry in the students' accommodation will enhance the students' satisfaction as they may sometimes want to prepare meals of their own culture. This accords with the suggestion of Reeves & Roche (2010) that kitchenette is one of the facility that students expect to be in their accommodation, as well as the findings of Amole (2009) that the presence and quality of kitchenette predicted satisfaction in students. Also a well functional common & recreation room for the international student should be provided as this will positively enhance their satisfaction. These further corroborate the idea of Najib et al. (2011), who suggested that the common & recreation room influences satisfaction of student as they see it as places to relax and have fun after normal school activities.

Table 2. Mean Scores of Satisfaction Attributes

Dimension	Mean	Standard Deviation
Accommodation Unit		
Bedroom	3.36	0.86
Study area	3.49	0.88
Washroom	3.17	0.91

Pantry(Kitchenette)	2.81	1.11
Common & Recreation room	2.93	0.92
Support Services		
Safety & Security	3.35	0.91
Parking facility	3.32	1.01
Building Services	3.29	0.82
Internet facility	2.68	1.06
Sport facility	3.03	1.11
Cafeteria	3.08	0.96
Social Characteristics		
Convenience of use	3.28	0.82
Management	3.09	0.94

4.3 Regression Analysis

A regression analysis was conducted to examine the influence of satisfaction dimension on the overall satisfaction of international students. The results as presented in Table 3 reveal that R^2 is .663, which implies that the satisfaction dimension explains 66.30% of overall satisfaction. A strong relationship is indicated by the high adjusted R^2. Further results shows that all three dimensions are significant, $F (3, 252) = 163.357$, $p = .000$: accommodation unit ($p = .002$), support services ($p = .000$), and social characteristics ($p = .000$). The social characteristics with beta *(β)* value .285 indicates that it is the most important dimension that explains the overall satisfaction of international students, followed by support services ($β = .055$) and accommodation unit ($β = .042$). The positive coefficient indicates that the overall satisfaction of a greater proportion of international students will increase if the satisfaction on accommodation unit, support services, and social characteristics are high.

Table 3. Regression Results

Dimensions	Beta *(β)*	Sig.
Accommodation Unit	.042	.002
Support Services	.055	.000
Social Characteristics	.285	.000
R^2	.663	
Adjusted R^2	.659	
F value	163.357	
p value	.000	

4.4 Analysis of Variance (ANOVA)

A one-way ANOVA was performed on the satisfaction dimensions to investigate the difference in level of satisfaction among the university group; IIUM, UPM and UiTM as presented in Table 4. The results reveal one statistically significant dimension; Accommodation unit, $F (1, 250) = 8.881$, $p = 0.003$. Hence, the difference in mean value of accommodation unit was significant as perceived by the various university groups. The Scheffe post hoc test was further conducted in other to get a more robust view on the differing groups. Findings reveal that there exist a statistically significant difference between IIUM (M = 15.19, SD = 3.35) and UiTM (M = 16.74, SD = 3.05) in the way they perceive satisfaction with their respective accommodation unit ($p = 0.031$). There was no evidence of a significant difference between IIUM and UPM ($p = 0.092$) as well as UiTM and UPM ($p = 0.825$). International students from UiTM expressed to have perceived a significantly higher satisfaction level in accommodation unit than those from IIUM. This result may be explained by the fact that international students in UiTM stay in an apartment type accommodation where sharing of facilities are less compared to students in IIUM who live in single room units where they share virtually all accommodation facilities with other students. Turning now to the

dimensions of support services (*p* = 0.710) and social characteristics (*p* = 0.099), no significant difference between the groups was evident.

In summary, these results suggest that the students perceive a certain degree of satisfaction with their accommodation unit, though at different level. Furthermore, the university management must pay attention across all dimensions of the students' accommodation, in which the students are provided with adequate and quality accommodation facilities that will enhance their satisfaction. These elements has a direct effect on the perception of students and the reputation of the universities.

Table 4 ANOVA Test

	IIUM		UPM		UiTM	
Dimensions	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Accommodation Unit	15.19	3.35	16.32	3.87	16.74	3.05
Support Services	18.54	4.45	19.98	3.75	17.68	4.02
Social Characteristics	6.19	1.54	6.71	1.22	6.49	2.03

The results of this study indicate that the satisfaction level among international students in Malaysia is moderate, with a measure of 3.29 on the 5 – point Likert scale. In point of fact, the mean score of most satisfaction items records above 3 which is not very much encouraging. The above results, when further subjected to regression analysis indicates that the three dimensions (accommodation unit, support services and social characteristics) were statistically significant in enhancing overall satisfaction of international students. Therefore, these dimensions should be prioritized through constant development by the university management in handling international student satisfaction. Despite the fact that support services and accommodation unit are the least satisfied dimensions, it is established in this study as highly important. This findings support the ideas of Najib et al. (2012) who proposed that the provision of sophisticated accommodation unit (study-bedrooms, washroom, pantry, common & recreation rooms) and support services provided in student accommodation can result to a better study life. Hence, the university management must provide adequate and functional support services that will facilitate international students' purpose for a better experience. Even though international students are satisfied with social characteristics, efforts should be geared towards continuous improvement of the management attributes (e.g. policies, rules and regulations, staff friendliness, rent) in the student accommodation. In addition, it is important that the management ensure that all accommodation facilities are easily accessible by the students to bring about convenience of use.

5.0 CONCLUSION AND FUTURE WORKS

This study set out to examine international students' satisfaction with accommodation facilities within public universities in Malaysia. Results found that generally, the students are satisfied with the provided accommodation facilities except for items within the satisfaction dimension such as common and recreation room, pantry (kitchenette), and internet facility that revealed a relatively low satisfaction level. Therefore further actions could be tailored towards improving these facilities to enhance the satisfaction of international students. The empirical findings in this study provides a deeper insight into international students' satisfaction, which may assist the university management, maintenance and facility managers in appropriately addressing the pertinent issues highlighted in this study in order to attract more international students into universities in Malaysia. In this study, it was found that all satisfaction dimensions; accommodation unit, support services and social characteristics are significant in influencing the overall satisfaction, with social characteristics the most effective. This study further points out that in other to attract internal students, there is need for the Malaysia higher education sector to increase the satisfaction level of the students with student accommodation. This can be done through ensuring adequate and proper functionality of accommodation facilities. This study finally suggests that accommodation facilities should be made as one of the key performance indicators in the international education sector. Through conducting

constant monitoring and survey, appropriate actions can be taken so that the country can keep up its competitive edge as one of the top international education service provider in Asia.

The limitation of this study is that it only focused on international students in public universities. A future research could cover the scope of private universities in Malaysia so as to have a better representation of international students for generalizability purposes. In addition, further study could usefully explore a qualitative approach on international students' satisfaction with accommodation facilities. Conducting an interview with international students may give further information on important issues to the students. Also, conducting an interview with the management and maintenance team of the accommodation may be useful to acquire more detailed information regarding operations such as the maintenance schedule. This is likely to have an influence on the satisfaction of international students.

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