

## **LIVING IN OFF-CAMPUS STUDENT HOUSING: ANALYSIS ON THE SATISFACTION LEVEL RELATED TO ENVIRONMENTAL AND PHYSICAL ASPECTS**

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### **Abstract**

Malaysian Higher Education Institution has faced a high population growth of students in recent years and increasing demand for off-campus student housing due to the lack of supply of on-campus accommodation. Consequently, the environment of off-campus student housing differs from the on-campus student housing in terms of environmental and physical aspects, facilities provided and neighbourhood surroundings. There is limited research on students' perceptions of living off-campus in Malaysia. Thus, this study aimed to assess the conditions of off-campus student housing in terms of environmental and physical aspects. The target population was students and hostel managers in an off-campus condominium in the Subang Jaya. The quantitative method was used in this study using survey questionnaires. Surprisingly most students were satisfied with their off-campus student housing in Subang Jaya. It was suggested that hostel management create a user-friendly complaint system to manage student complaints and establish rules and regulations on the facilities used better and efficiently. This study offers insight for students seeking off-campus accommodations and hostel management with the factors influencing satisfaction levels and the appropriate methods to improve satisfaction levels in the off-campus condominium.

Keywords: Environmental factors, Off-campus living, Physical factors, Student accommodation, Student housing.

## **1. Introduction**

Malaysia is becoming a hotspot for international universities that would like to open a branch as its student population is much higher. Based on Malaysia Education Statistics [1], there are about 560,000 enrolments in public universities in Malaysia. However, Higher Education Institutions (HEI) find accommodating all students in their existing housing facilities difficult. Some students would have to go for the second choice, the outside private student housing provided by off-campus developers.

Off-campus student accommodation is not the same as on-campus student housing. It is open to choosing the most favourable type of housing from most family housing, including apartments, condominiums, terraced, semi-detached, and detached houses [2]. According to Wong [3], in Klang Valley, owners have established numerous off-campus student housing in cities such as Shah Alam, Subang Jaya, and Cyberjaya. These benefits students who prefer off-campus accommodation due to the non-availability of on-campus student accommodation. However, the environment between on-campus and off-campus is much different. The quality of living will depend on its satisfaction level. Therefore, it is essential to identify the satisfaction level towards off-campus student housing in Malaysia.

### **1.1. Problem statement**

The condition of the off-campus student housing differs from the on-campus student housing. Living off-campus is more challenging than living on campus. These issues would take several forms, such as facilities provided, housing characteristics, tenancy conditions, and the neighbourhood environment as cited by Thomsen and Eikemo [4], resulting in varying degrees of satisfaction between on-campus and off-campus housing.

There are many studies carried out on living off-campus. However, the results of the studies are significantly different between Malaysia and other countries. In one research project in Shah Alam, Malaysia, students living off-campus had low satisfaction with their environment [5]. On the other hand, the Trondheim, Norway study showed that students had a high satisfaction level with their off-campus living [4]. It was difficult to determine the general condition of off-campus living in both studies mentioned above due to uncontrollable variables such as house type, neighbourhood environment, and living habits, which cannot be compared. In addition, it was discovered that very little research was conducted on off-campus living compared to on-campus living. This study examined the environmental and physical aspects of off-campus student accommodation in Malaysia. The condominium typology of off-campus accommodation was focused on in the study.

### **1.2. Aim and Objectives**

This paper aimed to assess the conditions of off-campus student housing in terms of environmental and physical aspects. The objectives of this research are: 1) to identify the student satisfaction level on off-campus student housing; 2) to identify the environmental and physical factors influencing the satisfaction level of the off-campus student housing, and 3) to suggest the appropriate ways to improve the satisfaction level for the off-campus student housing.

## 2. Literature Review

Students' Residential Satisfaction (SRS) is students' overall experience or perception towards student housing's living environment [6, 7]. Higher satisfaction levels will only be achieved when students' expectations are met [8]. Several studies were carried out on the SRS level; for instance, Najib et al. [9] measured the satisfaction level of student housing facilities at a university in Malaysia. Khozaei et al. [8] studied the factors predicting the SRS in student housing by comparing on-campus and off-campus, while Muslim et al. [5] studied the satisfaction of students in UiTM Shah Alam living off-campus. The overall results are generally positive for the on-campus only as fewer studies regarding off-campus accommodation exist. On the other hand, this study only focused on the satisfaction of the physical and environmental factors by referring to the model provided by Muslim et al. [6] which consists of students' living conditions, community facilities and services and neighbourhood physical surroundings.

### 2.1. Physical and environmental factors influencing the SRS

Many aspects can be identified to investigate the SRS level. According to Muslim et al. [6] there are four (4) aspects: (i) physical attributes, (ii) social attributes, (iii) financial attributes and (iv) management attributes. This study's focus was limited to physical attributes, including factors of students' living conditions, community facilities and services and neighbourhood physical surroundings.

### 2.2. Challenges faced by students living off-campus.

The proximity to campus or other community facilities is one of the challenges faced by off-campus student housing [10]. Off-campus students live miles from campus and must commute, adding to high transportation costs and additional costs such as electricity, water, internet, and other essential utilities. Besides, insecurity is also one of the problems faced. Off-campus locations are more likely to be the primary focus of crime than on-campus locations. This is because off-campus students are not protected by university security. Overcrowding is a problem faced by both on-campus and off-campus students [10]. Space constraints are the primary cause of overcrowding difficulties. In addition, the exorbitant rental is one of the disadvantages of off-campus housing. Ghani et al. [11] confirmed this assumption by asserting that off-campus housing costs are considerably higher than on-campus housing costs.

### 2.3. Appropriate ways to improve SRS

In terms of student housing satisfaction, hostel management is a critical factor. An efficient complaint system can expedite identifying the source of the issue [12]. The authors highlighted that strict rules and regulations on the amenities used would be one method to help hostel management provide better maintenance and services. Tenancy Agreement is also one of the effective ways to prevent poor governance [13]. The collaboration between universities and private developers can be applied to improve or solve the inadequate fund problem for facilities used in student housing [14]. Besides, the participation of higher education institutions (HEI) involved with the laws and regulations regarding off-campus accommodation is one of the appropriate solutions.

### 3. Research Methodology

The quantitative research method was used in this research. The target population for this study was the students living in an off-campus condominium in Subang Jaya. The target sample size for students was 363. The online survey questionnaires were conducted using Google Forms. The data obtained from the survey were analysed using frequency distribution for the demographic information collected; relative satisfaction index (RSI) for the satisfaction level of the students. Descriptive analysis was used to rank the factors influencing the SRS and appropriate ways for improving the SRS level.

According to Olukolajo and Mbazor [15], the RSI formula is  $(5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1) / 5N$ . In addition, where a variable is assessed based on sub-constructs, the mean aggregate of RSI (MRSI) is determined. Based on Olukolajo and Mbazor [15], the RSI values for each of the variables of analysis were interpreted as follows.

1 –20 % represents “Very dissatisfied (VD)”,

21 –40 % represents “Dissatisfied (D)”,

41- 60 % representing “Fairly Satisfied (FS)”,

61 -80 % indicating “Satisfied (S)” and

81 –100” representing “Very satisfied (VS)”.

$$WMS_i = \frac{\sum_{i=1}^n (X_i * W_i)}{\sum_{i=1}^n W_i}$$

where:  $w_i$  = the allocated weighted value ,  $x_i$  = the observed value

### Research framework

Figure 1 shows the overall framework of this research. Assessing the satisfaction and significance of environmental and physical factors is necessary to study the overall condition of off-campus housing. Besides, overall recommendation on the appropriate ways to improve the SRS level of student housing is also essential to analyse the overall condition off-campus.

### 4. Key Findings and Discussions

There were 104 responses received from students via online survey questionnaires. The number of valid responses was 74 after data cleaning. Twenty-five (25) students were from DK Senza Residence, 13 from D'Latour, 11 from Pangsapuri Apartment SS15/6, 10 from Sunway Geo Residence, 5 from Nadayu 28 Residences and 10 from other off-campus condominiums. Table 1 shows the SRS level in students' living conditions.

Hence, Table 1 shows the SRS level is students' living conditions compared to other broad categories, 'Location of student housing/proximity to campus' received the highest RSI score (80%). The result opposed the findings of Olukolajo and Mbazor [15] which indicated that students were displeased with this aspect. This demonstrates that most off-campus condominium students in Subang Jaya reside near campus. Moreover, Chepkener [10] opined that students faced commuting difficulties, contributing to increased transportation expenditures. Furthermore, the results of this study also showed that most of the students were satisfied with the

size of the space, which also contradicted the findings of Muslim et al. [5], which showed that off-campus students were not comfortable with the spaces provided in the accommodation, felt less privacy and insecure. Maintenance, on the other hand, scored the lowest overall RSI, with 68.38%. This was unexpected as none of the previous studies showed that students were dissatisfied with this maintenance of the off-campus living accommodations.

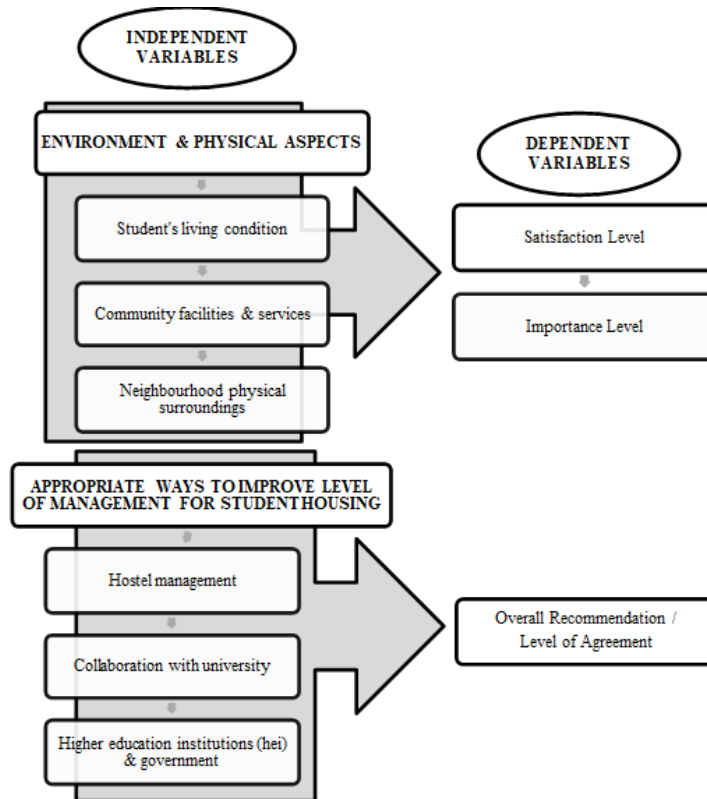


Fig. 1. Research framework.

Table 1. SRS level in students' living conditions.

Broad Category	Items	RSI (%)	Rank	Mean
Location of student housing/proximity to campus	Academic facilities	78.9	1	4.324
	Sports facilities	75.7	2	3.973
	University clinic	72.7	3	4.041
Architectural of student housing	Size	75.1	2	3.973
	Shape	72.7	3	3.716
	Façade design	70.5	6	3.757
	Type of door used	70.5	6	3.784
	Type of window	72.2	5	3.797
	Type of wall	68.1	8	3.919
	Type of flooring	76.8	1	3.811
	Space differences	72.4	4	3.865
Usability and arrangement of space	Floor plan	75.4	2	4.054
	Daily circulation	72.7	3	3.932
	Usability	75.7	1	4.014

<b>Internal facilities</b>	Bedroom	78.4	1	4.311
	Bathroom	71.6	7	4.122
	Toilet	71.1	8	4.081
	Laundry	71.1	8	4.054
	Kitchen	72.7	5	4.041
	Living room	72.7	5	4.081
	Dining area	73.2	4	4.108
	Wi-Fi	78.1	2	4.324
	Washing machine	73.2	3	4.068
	Cable TV	60.3	11	3.581
	Amenities	66.2	10	3.892
<b>Size and physical condition</b>	Size of bedroom	75.4	1	4.149
	Size of bathroom	71.9	3	3.919
	Size of toilet	71.1	7	3.932
	Size of laundry	71.6	6	3.730
	Size of kitchen	71.9	3	3.770
	Size of living room	72.7	2	3.986
	Size of dining area	71.6	5	3.838
	Ventilation	71.1	7	4.243
	Number of socket	70.3	9	4.081
<b>Densities</b>	In sharing space	74.9	2	4.054
	In condominium	72.9	3	4.014
	On the floor you live	75.4	1	3.743
	Waiting time	70.2	4	4.135
<b>Storage and furniture provided</b>	Space of the storage	71.6	1	4.081
	Furniture provided	69.7	2	4.041
<b>Maintenance</b>	Cleanliness	71.0	3	4.284
	Water supply	75.4	1	4.257
	Electrical supply	74.8	2	4.189
	Waste disposal	70.2	4	4.149
<b>Types of accommodation</b>	Rules and regulations	74.0	1	4.081
	Options of types	72.4	2	4.014
<b>Overall Satisfaction with Students' Living Conditions</b>	Location/Proximity	80.0	1	4.203
	Architectural aspect	74.3	5	3.797
	Facilities and features	74.8	3	4.081
	Usability	76.2	2	4.108
	Physical condition	72.4	7	4.027
	Densities	73.2	6	3.892
	Storage and furniture	71.6	8	4.095
	Maintenance	68.3	9	4.081
	Types of accommodation	74.5	4	3.973

Results in Table 1 also showed that the broad category with the highest mean score of 4.203 was the 'Location/proximity of student housing to campuses. Most of the respondents prefer student housing near university academic facilities. Results also showed that the least important category is the 'Architectural aspect,' with a mean score of 3.797. Khozaei et al. [8] agreed with this finding stating that architectural aspects such as the hostel exterior and materials used in the building are not significant criteria in choosing accommodation on-campus or off-campus.

On the contrary, the architectural aspect, availability and maintenance of social, recreational, educational services and health are less important broad categories to students. It was found that the duration used to travel to the campus from student

housing is the most crucial criterion, which obtained the highest SRS level and level of importance score. This means that the students were very satisfied with the most critical factors. Students were most dissatisfied with the TV cable in their housing, which only obtained an RSI of 60.27 %. The less important factor is the availability of public phones which obtained a mean score of 3.500. On the other hand, it is interesting to find out the discrepancy between the reality and expectation in the broad category of 'Health' of which the respondent rated the items in 'Health' as 'Very Important' but rated 'Health' in overall importance section as the lowest score.

Furthermore, this study also found that the condition of the off-campus in Subang Jaya is within a reasonable range. The overall students' residential satisfaction level is high, which means the students are generally satisfied with the environmental and physical aspects. The students were satisfied with the location of student housing/proximity to campus, accessibility to campus, city centre, health services, shopping and municipal services and security. However, they were dissatisfied with the maintenance in the off-campus condominium and the availability of public/neighbourhood facilities and privacy. In addition, the results revealed that all of the factors were significant for the students living off-campus. For them, the location/proximity of student housing to college, campus accessibility, city centre, health services, retail and municipal services, and privacy were the most critical categories.

It is important to note that individual preferences and expectations varied among students, and factors influencing satisfaction may differ based on personal circumstances. Additionally, external factors beyond the scope of this study, such as rental costs and management responsiveness, could also influence student satisfaction in off-campus housing. Based on the findings, several recommendations can be made to enhance the satisfaction levels of students in off-campus student housing. First, housing providers should consider the proximity of housing units to campus and public transportation options to increase convenience for students. Ensuring safety measures and promoting a positive neighbourhood environment are also crucial to enhancing student satisfaction. Regarding physical aspects, it also should prioritize the maintenance and cleanliness of units, ensuring that amenities are functional and meet the needs of students. Creating comfortable living spaces with ample storage options can significantly contribute to student satisfaction. Regular inspections and prompt resolution of maintenance issues are also essential to maintaining high satisfaction levels.

## 5. Conclusion and Recommendations

In conclusion, the findings of this research provide valuable insights for both university administrations, hostel managers and property owners. Enhancing the satisfaction level of students in off-campus student housing requires attention to both environmental and physical aspects. By focusing on creating safe, well-maintained, and strategically located accommodations, universities and property owners can contribute significantly to the overall well-being and academic success of their students.

As with any research, there are limitations to consider. The study's scope was confined to a specific geographic area and a particular student demographic, which may limit the generalizability of the results. Additionally, the research primarily relied on self-reported data, which might be subject to response biases and

subjective interpretations. Future studies could incorporate a more diverse sample and employ objective measures, such as objective housing assessments and observational data, to strengthen the research's validity.

Overall, this research provides valuable insights into the factors influencing students' satisfaction in off-campus student housing. By addressing the identified aspects, universities and property owners can work collaboratively to improve the overall living experience of their students, fostering a positive and supportive environment conducive to academic achievement and personal growth.

### 5.1. Contribution of the study

This study contributes to the decision-making process for students living off-campus by determining the overall condition of the off-campus condominium in the Subang Jaya based on the perceptions of the off-campus students regarding the level of satisfaction with the overall environment and physical aspects. Furthermore, the off-campus management will also be able to improve their services, and this study has also indicated the appropriate ways to improve the SRS level in off-campus condominiums from hostel managers' perception, which may help students to get a more convenient off-campus life.

### 5.2. Recommendation

This research focused exclusively on the condominium student housing type. Therefore, it is recommended to investigate other off-campus student housing types, such as terraced houses, apartments, and shophouses. Finally, future studies can also be made on the challenges faced by the off-campus student hostel management.

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