

**STUDENT PERCEPTION ON STUDENT HOUSING FACILITIES IN  
UNIVERSITI TEKNOLOGI MALAYSIA THROUGH POST OCCUPANCY  
EVALUATION**

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**DEDICATION**

*“To my dearest father, mother, brother, and my fellow friends,  
thanks for all the support and encouragement given.....”*

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## ABSTRACT

Malaysia higher education has gone through a tremendous change in mass education. Student enrolments have grown rapidly in Malaysia universities and this change has brought to the demands on improving in student housing facilities, learning spaces, recreational and other supporting facilities. Development of higher education has grown rapidly has encourage government to strengthen universities so they are more competitive. Student housing facilities in universities are design to fulfil students' needs. This is very important to provide a better learning opportunity for student and also play an important role in attracting and retaining students in the competitive demand. Therefore, student housing in universities need to be equipped with a good facilities and services to enhance the performance of the higher education institutions. Addressing the above issues, the objective of this research is to determine the perception of students on the facilities in their hostel in UTM. This was tested by twelve performance criteria and twenty six performance parameters which were identified from the literature. Then, the second objective is to determine the importance index of the performance criteria of student housing in UTM. This research is using frequency analysis and importance index calculation. The finding of this research shows that the functionality (technology) and security (security system) need to be focused and improve by the facility manager. The findings of this research can greatly benefit to the facility manager in UTM to improve student housing facilities and services and fulfil student needs and requirements.

## ABSTRAK

Pengajian tinggi di Malaysia telah melalui perubahan yang besar dalam pendidikan pada masa kini. Jumlah bilangan pelajar yang mendaftarkan di universiti telah berkembang dengan pesat di universiti-universiti Malaysia dan perubahan ini telah membawa kepada permintaan untuk meningkatkan dalam kemudahan perumahan, ruang rekreasi pembelajaran dan kemudahan lain. Perkembangan ini telah menggalakkan kerajaan untuk mengukuhkan universiti supaya mereka lebih berdaya saing berbanding dengan universiti lain. Selain itu, Kemudahan perumahan pelajar di universiti adalah reka bentuk untuk memenuhi keperluan pelajar. Ini sangat penting untuk menyediakan peluang pembelajaran yang lebih baik untuk pelajar dan juga memainkan peranan penting untuk menarik dan mengekalkan pelajar dalam permintaan yang kompetitif. Oleh itu, perumahan pelajar di universiti perlu dilengkapi dengan kemudahan dan perkhidmatan yang baik untuk meningkatkan prestasi institusi pengajian tinggi. Berdasarkan isu-isu di atas, objektif kajian ini adalah untuk menentukan persepsi pelajar mengenai kemudahan di perumahan pelajar di UTM. Ini telah diuji oleh dua belas kriteria prestasi dan dua puluh enam parameter prestasi yang telah dikenal pasti dari literatur. Kemudian, objektif kedua adalah untuk menentukan indeks kepentingan kriteria prestasi perumahan pelajar di UTM. Kajian ini menggunakan analisis kekerapan dan pengiraan indeks kepentingan. Hasil kajian ini menunjukkan bahawa fungsi (teknologi) dan keselamatan (sistem keselamatan) perlu diberi tumpuan dan diubah oleh pengurus kemudahan tersebut. Hasil kajian ini boleh memberi manfaat yang besar kepada pengurus kemudahan di UTM untuk meningkatkan prestasi kemudahan dan perkhidmatan perumahan pelajar dan memenuhi keperluan pelajar.

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## **LIST OF ABBREVIATIONS**

- UTM - Universiti Teknologi Malaysia  
POE - Post Occupancy Evaluation

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

In this modern day living, a comfortable, fully furnish and well equip housing is one of the very basic requirements and important to human beings. A good and comfortable house or home can be referred as one of the fundamental base of people's daily lives and routines (Klis & Karsten, 2009). Hassanain (2008) noted that a proper student housing has a quiet study environment with security and privacy and promote good friendships among the students.

In past two decades, Malaysia higher education has gone through a tremendous change in mass education (Mohamed Khaled, 2010a). Student enrolments have grown rapidly in Malaysia universities. This change has brought the demands on increasing in residential facilities, learning spaces, recreational and other supporting facilities (Muslim, M.H., *et al.*, 2012). Development of higher education has grown rapidly to encourage government to strengthen universities to face challenges so they are more competitive (Mohamed Khaled, 2010b). This development not only focused on public universities but also involved private universities and colleges. Therefore, universities need to be equipped with a good facilities and services to enhance the performance of the higher education institutions.

## 1.2 Initial Study

An initial study was carried out to establish the problem statement of this research. The researcher has taken the effort to do a preliminary survey involving students on the perception of housing facilities and interview with the head of development department from the Office of Asset and Development and the senior supervisor from Kolej 9, Universiti Teknologi Malaysia (UTM).

i) **Preliminary survey with students from Universiti Teknologi Malaysia (UTM)**

A preliminary survey was carried out involving students in UTM. The preliminary survey was carried out to seek the view of students on the current student housing facilities. A total of 30 questionnaires were distributed to students in the campus. Students have completed the survey and the result of the preliminary survey is explained in Chapter 1, section 1.4.

ii) **Interview with the head of development department from Office of Asset and Development**

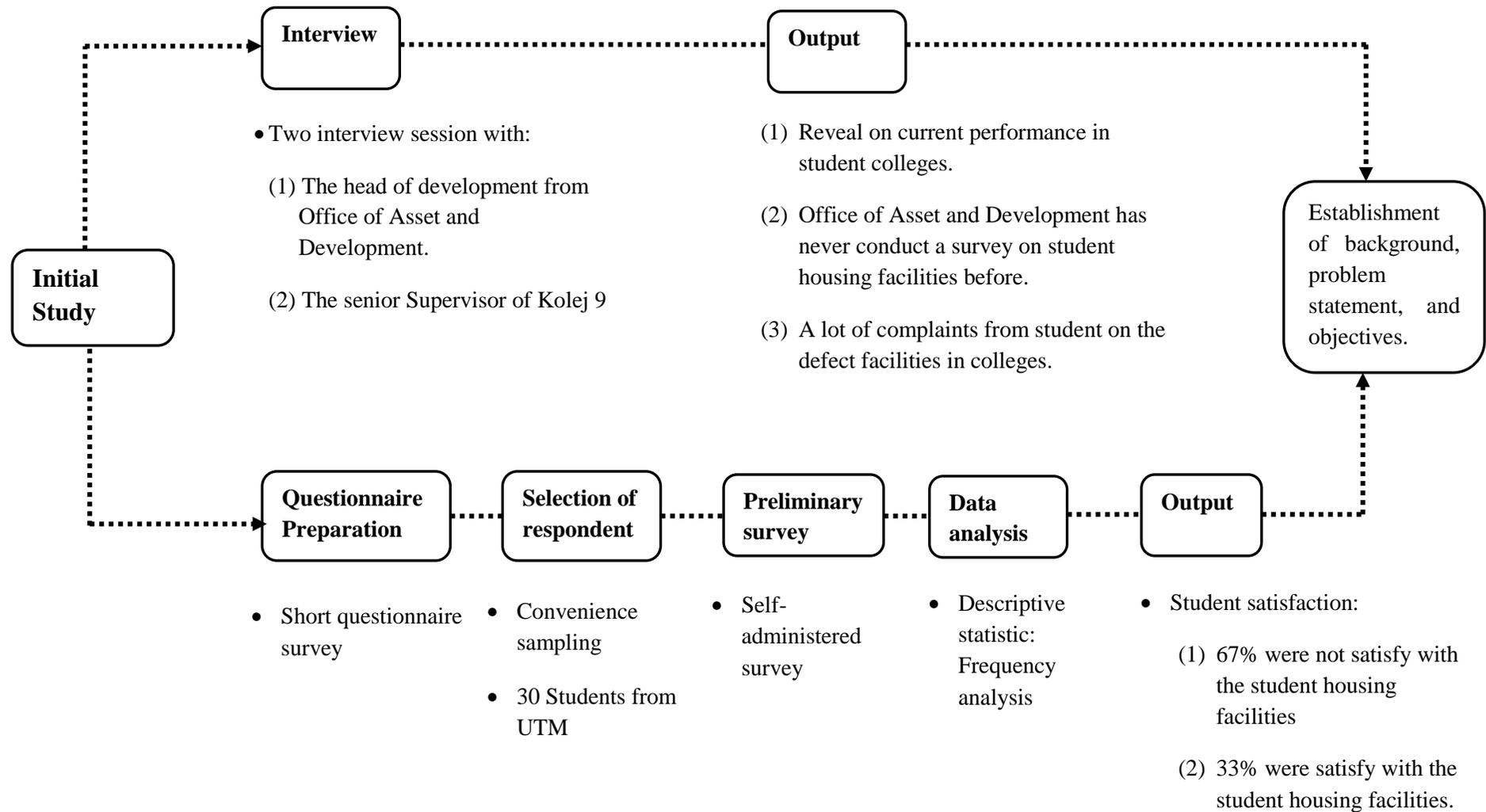
One interview session was conducted with the head of development department in the effort to get a deeper understanding on student housing and facilities provided in Universiti Teknologi Malaysia (UTM). This interview has revealed the current performance of student housing in UTM still needs to be improved as there were many complaints received from students regarding the facilities provided in student housing. Furthermore, operation and maintenance in student housing was being done almost every day as there were a number of maintenances need to be repaired. Meanwhile, a study regarding user perception toward student housing facilities was not conducted before in UTM. Therefore, it is very beneficial to the Office of Asset and

Development to know about student perception on the student housing and what to be improved.

iii) **Interview with the vice supervisor of Kolej 9**

One interview session was conducted with the senior supervisor in Kolej 9. This interview has revealed that students always complaint on their student housing facilities in their college. Based on the record book, numerous complaints were recorded to seek for maintenance. She claimed this problem is getting serious as too many complaints about the college might affect the college image and students might not want to stay in colleges anymore especially for postgraduate students. Therefore, it will be useful if a study on student's perception on hostels was held by the researcher to understand students' needs and eventually can help the Office of Asset and Development in UTM for further improvement and future management.

Figure 1.1: Initial study



### 1.3 Background of Study

Universities have always about teaching, learning and research. Due to the developments in collaborative research and teaching opportunities, these have created pressure on the universities facilities. Facilities in universities are design to fulfil students' needs. This is very important to provide a better learning opportunity for student and universities' facilities also help to attract and retain students in a competitive demand. Old buildings and facilities are no longer fits for all models of teaching and learning and it is no longer able to adapt the advance technology and student learning. Nowadays, the biggest challenges for the universities is keeping track with the changing educational as the facilities are no longer fulfil students' requirement.

The demand for modern student housing has increased in today's higher learning environment (Najib and Yusof, 2011; Khozaei *et al.*, 2010). Modern student housing facilities are considered essential to cater student housing needs (Susilawati, 2001; Hassanain, 2008; Najib and Yusof, 2011). In recent years, universities in Malaysia have aware and commit to provide a better services and facilities for the student in regard to solve student's housing problem (Muslim, M. H., *et al.*, 2012). Edsir (2008) noted that a 30 percent of annual increase in international student since 2006 was maintained by universities, as part of its strategy to become a new contender in global higher education. Thus, providing a high-quality living environments for students is an important for them to live and study in Malaysia universities because the foreigners tend to pay more on their education.

University Teknologi Malaysia (UTM) is an innovation-driven entrepreneurial Research University and a leading research-intense university. UTM is the main campus in Skudai, Johor that received an increasing of students' enrolment especially on international student every year. UTM is striving to attract a large number of students to their own programs and adopting different strategies to maintain their own students. A higher residential satisfaction in campus will encourage students to perform well in their studies. By getting good academic, living,

and social goals during residency in student housing, thus these accomplishments can contribute to attain Malaysia visions as well.

#### 1.4 Statement of Problem

UTM is striving to attract a large number of students to their own programs and adopting different strategies to maintain their own students. UTM seek to provide a world class facility to students in the university to attract more students as the government's goal is to attract 120,000 international students in 2015 and to promote Malaysia as a regional center of educational excellence (Bernama, 2010). Melnikas (1998) and Sitar and Krajnc (2008) stress that evaluating and renovating of housing is crucial to increase the occupants' standards of living as well as rectify any defects in the facilities. Thus, resident satisfaction must be ascertained regularly to address student housing needs.

Student housing facilities play an important role to provide a comfortable and healthy lifestyle to student in the campus. The Malaysia government has embarked on the transformation of the institution of higher education (MOHE, 2007). With this rapid development, university need to be equipped with conducive student housing in enhancing the students well-being. In years time, there were numerous of studies on student housing were conducted in overseas and also in local.

Table 1.1: Previous studies on student housing

No.	Studies	Author
1	Predictors of student satisfaction in university residence halls.	Foubert <i>et al.</i> , (1998) in United States
2	The effects of floor height on the perception of room size and crowding.	Karya and Erkip (2001) in Turkey
3	On the performance evaluation of sustainable student housing	Hassanain (2008) in Saudi Arabia

	facilities	
4	Residential satisfaction in students' housing.	Amole (2009a) in Nigeria
5	Evidence base prioritisation of indoor comfort perceptions in Malaysian typical multi-storey hostels.	Dahlan <i>et al.</i> , (2009) in Malaysia
6	Undergraduate students' satisfaction with hostel and sense of attachment to place: Case study of University Sains Malaysia	Khozai <i>et al.</i> , (2010) in Malaysia
7	Measuring satisfaction with student housing facilities	Ulyani.N <i>et al.</i> , (2011) in Malaysia.

Based on the table 1.0 above, Foubert et al., (1998) from United States and Khozai et al., (2010) from Malaysia were explore on the physical and social factors that influence students' residential while Karya and Erkip (2001) were evaluated the students' satisfaction focusing on perceptions of room size and crowding in Turkey. Besides, Hassanain (2008) studied on the degree of satisfaction in terms of both technical performance (i.e., thermal comfort) and functional performance (i.e., room layout and furniture quality in sustainable student housing facilities). Meanwhile, Amole (2009a) investigates on the characteristics of residence halls in Nigeria that correspond with high levels of residential satisfaction among students while Dahlan et.,al (2009) focus on a specific aspect which is the perception of thermal comfort in Malaysian on-campus housing rooms. As the previous studies do not cover a broad spectrum of satisfaction on student housing and therefore, a user satisfaction study on student housing facilities should carry out in Universiti Teknologi Malaysia (UTM) to find out students' perception on the hostel facilities provided.

Students need a good and comfortable student housing as they are staying in the hostel during workdays and this secondary residence is temporary in nature. Thus, a well equip student housing is essential to provide a better living environment for

students. Good ambience of student housing bring benefits to student. Some authors argue students can perform well in their academic if they are provided with good and comfortable living conditions in their student housing (Amole, 2005; Hassanain, 2008). According to Zahran (1972), an adequately planned campus housing facilities foster mutual interests and desirable educational outcomes among student population. Furthermore, a better facility helps the campus in return to increase student's user satisfaction on the facilities. Better facilities and services attract students to come abroad especially for the international student and this increase the number of student to study in the university every year. Gow (1999) notes that more than percent of all commencing students have based their decision to come to a particular university on the quality or appearance of its campus, its building and its facilities. The facilities play an important role in the campus as it is one of the marketing tools to attract student on making decision when choosing their favourable university and a variety of good facilities in the campus definitely will be student's top choice. Despite providing a good quality of education in the campus, UTM should provide a world class accommodation as one of the supporting tool to transform the university business to the strategic level.

However, there is not any user satisfaction study on student housing facilities in UTM. An interview with the head of development officer from Office of Asset and Development in UTM has revealed that there is not any study regard on the student accommodation. Apart from that, there were numerous studies on user satisfaction in UTM but none of the studies is regard on student housing facilities in the campus.

Table 1.2: Previous studies on user satisfaction in UTM

<b>No.</b>	<b>Study</b>	<b>Author</b>
1	Kepuasan pelanggan dalaman terhadap fasiliti fizikal dan perkhidmatan di kompleks sukan UTM	Siti Sarah Binti Mohd Azlan (2009)
2	Instrumen pengukuran jurang kualiti	Siti Fatimah Binti Muhamad Akhir

	perkhidmatan Perpustakaan Sultanah Zanariah UTM	(2008)
<b>3</b>	Keselesaan termal di kalangan pekerja Perpustakaan Sultanah Zanariah UTM	Lee Way Keong (2010)
<b>4</b>	A study on the level of satisfaction of lecturers towards the physical environment in their office room UTM	Nik Fatma Arisya Nik Yahya (2010)
<b>5</b>	Pengaruh elemen persekitaran fizikal dan kelakuan ke atas produktiviti pekerja di pejabat UTM	Nik Hazlina Nik Mat (2010)
<b>6</b>	Expectation and perception of students for service quality in UTM sports complex	Ooi Sher Yeen (2010)
<b>7</b>	Strategising facility management to meet international student requirement in UTM	Muhammad Yahya Mai (2009)
<b>8</b>	Expectation and perception of postgraduate students for service quality in UTM	Effaziela Mohamad Tahar (2008)

Therefore, we do not know whether the housing facilities provided in UTM meet the student's requirement and we will never know the real situation on the hostel facilities provided is if a study of students' perception does not investigated.

An interview with the supervisor from Kolej 9 claimed they received at least one complaint from the students on the hostel facilities everyday regard on the poor internet connection, unclean toilet, furniture defect, poor parking space and so on. At the same time, a preliminary study was conducted by the researcher (refer to 1.4 for the details). There were sixty seven percent (67%) of the students do not happy with

the facilities provided while thirty three percent (33%) of the students are happy with the hostel facilities. The survey also revealed the hostel management should improve the hostel facilities and they strongly feel there is a need to do a user satisfaction study on the housing facilities in UTM as the Office of Asset and Development of UTM can improve the hostel facilities and services.

Conducting a user satisfaction study on student housing is crucial because we will never know how students perceive the facilities in the campus's accommodation. UTM will never know how to improve the hostel facilities without understanding the students' needs. The institution will never know what is the benchmark of world class facilities to remain competent among the competitors. Student always hope for improvement of the facilities provided in the hostel but it is always improve by wishful thinking. In conclusion, user satisfaction study on student housing facilities should carry out to determine the students' perception on the hostel facilities. Then, it is essential to determine the level of importance of the performance aspect of student housing facilities.

### **1.5 Research Question**

This research attempts to answer the following questions:

**Q1- What is the students' perception on the student housing in Universiti Teknologi Malaysia (UTM)?**

The answer to this question is needed to carry out a study on the student's perception towards the student housing facilities in UTM to determine whether the facilities provided achieve the needs of user. During the study, student's perception will be examine based on building performance criteria which chosen from literature review which related to student housing.

**Q2- What is the importance index for the performance criteria in this study and need to be focused?**

The answer to this question will provide Office of Asset and Development on which facilities they need to focus on in order to make improvement on that particular performance criterion.

## **1.6 Research Objectives**

Addressing the research questions mentioned in 1.5, this research aims to:

- i) To determine the students' perception on the student housing facilities in Universiti Teknologi Malaysia (UTM).**

This is important and benefit to the Office of Asset and Development to understand what is the students' perception on the current performance of student housing facilities. This study can direct the administrator on what to improve on the facilities in UTM.

- ii) To determine the importance index for the performance criteria of student housing facilities in UTM.**

This is important to show the importance index of the performance criteria that need to be focus by Office of Asset and Development. This plays an important role to help the management to put more effort on that criterion.

## **1.7 Scope of Study**

This study will focus on the colleges in UTM which are:

1. Kolej Rahman Putra
2. Kolej Tun Fatimah
3. Kolej Tun Razak
4. Kolej Tun Hussein Onn
5. Kolej Tuanku Canselor
6. Kolej Perdana
7. Kolej 9 & 10
8. Kolej Tun Dr. Ismail
9. Kolej Datin Seri Endon
10. Kolej Dato' Onn Jaafar

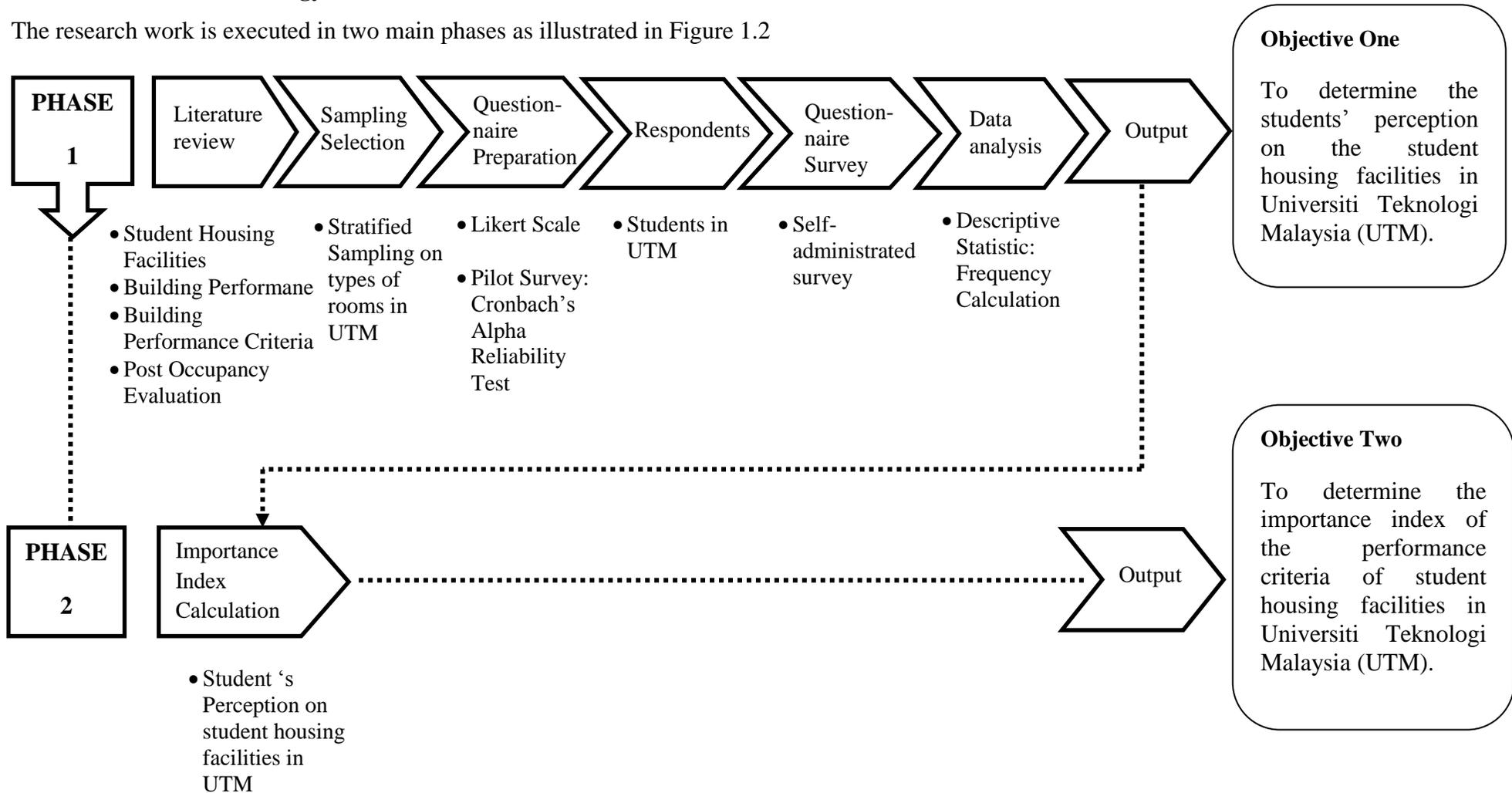
Sampling of this study will be taken based on the types of room in UTM which are “Single Room”, “Single with Bathroom”, “Single Executive”, “Double Room” and “Housing for Spouse”. Meanwhile, the respondent of this study will be the students who staying in UTM.

### **1.8 Significance of study**

The significance of this study is the Office of Asset and Development will have a better understanding on student's perception on the student housing provided. Base on this research, the facility managers in UTM can know which performance criteria are critical to be improved so that students will have a better stay in the campus.

### 1.9 Research methodology

The research work is executed in two main phases as illustrated in Figure 1.2



## 1.10 Chapter Outline

The organisation of chapters in this research thesis is as follows:

**Chapter 1:** Chapter 1 introduced the background information of the research comprising the statement of problem, research objectives, scope of the research, the significance of the research, and a brief discussion on the methodology of the research.

**Chapter 2:** Chapter 2 is the literature review of the relevant studies field. This chapter included the review of the student housing facilities in overall and student housing in Universiti Teknologi Malaysia.

**Chapter 3:** Chapter 3 explains the building performance and the building performance criteria in this study. This chapter emphasized and explained on the performance criteria used in the research.

**Chapter 4:** Chapter 4 explains the research methodology used to conduct the study. This chapter emphasized on the rationale of using the choice of research methods and data analysis techniques.

**Chapter 5:** Chapter 5 presented the research findings based on the objectives. The data were analyzed and showed in this chapter. All the findings will be gathered and evaluated.

**Chapter 6:** Result and discussion were discussed in this chapter based on objectives.

**Chapter 7:** This chapter explained on the conclusion and recommendations of the research. The findings summary was displayed and future research recommendations on the relevant field are discussed. The limiting conditions are discussed as well.

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