[POM 5] INVESTIGATING THE INFLUENCE OF FACILITY MANAGEMENT ON STUDENTS' QUALITY OF LIFE IN STUDENT RESIDENTIAL HALL IN UNIVERSITI UTARA MALAYSIA

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ABSTRACT

Facility management is the integration of processes within an organization to maintain and develop the agreed services which support and improve the effectiveness of its primary activities. Due to its importance, it is highly critical to study and understand critical issues surrounding this endeavour in relation to the students' quality of life. Referring to the above, this article reflects outcomes in view of the following objectives: (1) to expose the relationship between quality of life with facility management at student residential hall (2) to assess the level of influence of facility management on quality of life. A set of questionnaire derived from WHOQOL instruments (psychological health, independence, social relationship, and living environment) was distributed to 120 students at residential hall in UUM which contains of 16 questions. Likert scale was used in measuring student satisfaction. The data was analysed using Statistical Package for the Social Science 23(SPSS 23). Differences between the gender, race and year of study are expected to be critical determinants that affect the quality of life in Universiti Utara Malaysia (UUM).

Keywords: facility management (FM), quality of life (QoL), student expectation, service

INTRODUCTION

Facility management (FM) is the consolidations process in an organization to achieve and everlast the agreed services which improve and support the effectiveness of its primary activities. It is also an interdisciplinary business function that coordinates space, infrastructure, people and organization. More often than not, it is related with the administration of schools, universities, recreational areas, office blocks, arenas, convention centres, shopping complexes, hotels, manufacturing and shipping. FM is defined as the process of designing, delivering and sustaining facilities to fulfil the requirements of individuals in the built environment (Alexander, 1996).

Generally, FM encompasses all works and events related to keeping a complex operating. Typically, FM includes a wide range of purpose and support services. Traditionally, university is always been about teaching, learning and research, but the

implementation of learning process and the developments in common research and teaching methods have created pressure upon nowadays university facilities (McLaughlin & Faulkner, 2012).

Regarding toward good FM, (McLaughlin & Faulkner, 2012) indicates that facilities designed for higher education are required to fulfil a number of needs. In other words, is the need to provide learning opportunities for the student, but the university facilities also play a significant role in attracting and retaining students in a competitive demand – driven tertiary environment?

Quality of Life (QoL) is the general well-being of individuals and societies, outlining the negative and positive features of life. It perceives level of satisfaction from family, physical health, employment, wealth, education, finance and the environment. QoL has a wide range of contexts, including the fields of international development, healthcare, politics and employment.

PROBLEM STATEMENT

In order to achieve an excellent facilities management practically, the team who responsible should intensely understand this three important core competencies which can determine the success of their facilities management activities. There are three elements such as quality, technology and human, as indicates by International Facility Management Association (IFMA, 2009).

An excellent facilities management around the residence is important for student to guarantee their better life in university. Problems faced by students regarding the facility leads to too much complaint reported due to numerous type of malfunctions and broken facilities such as, broken toilet, lamps are not switching up, malfunction room fan, torn mattresses and etc.

LITERATURE REVIEW

Since 1970s, there have been many attempts to measure how environment and growth affect the health and well-being of people or what is generally referred to as quality of life. QoL is a multi-faceted concept. It embraces both tangible and intangible aspects of life. In some cases, researchers even include the basic elements of life like rights, privileges and the decision-making role of people in a society. Thus, the status of women becomes an important element of QoL in societies where it has been, in general, one of obsequiousness to men (Sen Gupta, 1998).

There are many attempted definition regarding what constitutes QoL in the different disciplines. Some authors alternates the QoL with other concepts such as happiness, life satisfaction and the good life (Cheng, 1988; Diener, 1984; Rice, 1984). With no solid definition, QoL has been defined as the degree of well-being, fulfilment and standard of living (Campbell et al., 1976). It is also believed that a person's quality life is directly related to that person's capability. A capability is defined as the ability, to do or be something, or more technically, to achieve a certain level of functioning such as education and health (Sen, 1987).

Facility management

The practice of FM is important as it can regularly determine any organizations are moving towards achieving their goals and targets. In their research (Coenen, Alexander & Kok, 2013) found that FM value network presents a demand-driven, co-creating, and subjective perspective of value and differentiating between various variable of perceived value in FM. Plus, they proposed to consider FM as a network of relationships which creates perceived value among organizational stakeholders. They also conclude that excellence FM practice highly depends on the consolidation of services, resources and communication.

Quality of life

QoL is defined as individuals' perceptions of their cultural and value system standing regarding their needs and wants. It shows that QoL refers to a subjective evaluation through environmental, social and cultural point of view. Because this definition of QoL focuses upon respondents' "perceived" QoL, a detailed cause are not expected to be gained but the result is probably in terms of defects of QoL. As such, QoL cannot be equated simply with the terms "health status", "life satisfaction", "life style", "mental state" or "well-being". QoL is refers to the subjective evaluation of individual overall life satisfaction and well-being (Lawton et al., 2000).

It is an objective and subjective evaluations on the tangible and intangible aspects align with the extent for personally and purposeful activity, confirmed through personal set of values. QoL consists of multiple dimensions state which is the psychological, physical, social relation and independency and their relationship with important characteristics of their environment (WHOQOL Group, 1995). QoL issues are increasingly being studied and researched upon because of their recent importance in promoting sustainable development. QoL is also being considered as a subject on its own or as an essential topic as part of the subject on the sustainable development for the teaching. However, the teaching of subjects such as sustainability or QoL shows the tremendous challenges because of the nebulous and multifaceted nature of the subject matter (Yuan, 2001).

Facilities management and its relationship on quality of life of university student Lavy (2008) in her study found that, structured and organized FM has the potential to create a better physical and system performances, thus improve the recipients satisfaction state through the efficiency on how the building is maintained and operated. Students have their own expectations on how especially the teaching facilities should be functioning (McLaughlin & Faulkner, 2012).

RESEARCH METHODOLOGY

In this chapter, through this section will discuss the methodology of this study which deals with research framework, research design and research analysis instrument.

Theoretical framework

Theoretical framework is the foundation for the entire research project based. The framework shows the dependent variable was regarding towards the FM in higher education level that is university's level that can consumes towards a better university's students life. FM components were validated in and adopted from previous studies

(Leung *et.al*), the elderly QoL was developed based on the QoL scale used by the World Health Organization (WHOQOL Group, 1995, 1998). The Figure 1 below shows the WHOQOL conceptual framework.

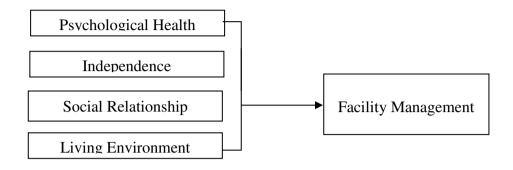


Figure 1 Conceptual framework

Research design

Research design is a framework for conducting the research project. It specifies the details or procedure necessary for obtaining the information needed to structure and or to solve research problem.

As mentioned, the objectives of this research are to examine the relationship between the psychological health, independence, social relationship and living environment factors on achieving a better FM practices for the sake of the QoL of university students. Some questions will be asked to the respondents to obtain the information about the variables. A lot of published information can be found for literature review. Besides that, reading material is used in this study to get more information such as journal and thesis.

The target population for this research is 120 people which are the university's student, who were randomly selected, specifically those who lives in Universiti Utara Malaysia (UUM) Sintok, Kedah, Malaysia in student residential hall. In this research, all data was analysed using the Statistical Package for the Social Science 23 (SPSS 23). The use of SPSS 23 required the data collected is numerically coded. Numerical codes were assigned for the majority of questions.

Data collection

A quantitative research analysis was used to obtain the data and to achieve the objective of this research. The quantitative method used is questionnaire. Questionnaire is the major method used for gathering the data. Questionnaire is also chosen as the technique to collect data because it can be self-administered and it is simple to score and use.

Research analysis

The questionnaire consists of 5 variables and three sections A, B and C. Section A consists of items based of demographic. It is the general information about the respondents such as gender, race, and years of study. For the relationships, we only focus on genders and years of study. This part is designed by using nominal and ordinal scale. The respondents have to answer all section of questionnaire.

Section B consists level of student's awareness about the facilities provided in their residential hall. Meanwhile, in section C, it consists 16 items under four variables as follows: (a) Psychological Health, (b) Independence, (c) Social Relationship and (d) Living Environment. And this part is designed by using five-point Likert Scale: (1) Strongly Disagree, (2) Disagree, (3) Natural, (4) Agree and (5) Strongly Agree.

FINDINGS AND DISCUSSIONS

The total number of the respondents involved in this study was 120 respondents. The gender distribution was 60 for females and 60 for males (Figure 2). The respondents for 1st, 2nd, 3rd and 4th years was contain with the same percentage of 25% (Figure 3).

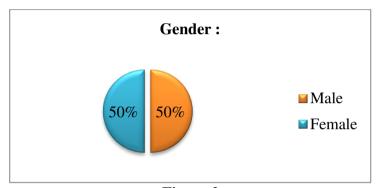
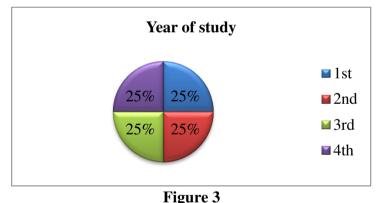


Figure 2 Respondents' distribution based on gender



Respondents' distribution based on years of study

Table 1 displays the results of the mean value on FM and QoL (psychological health, independence, social relationship, and living environment). The mean values of the FM ranged 3.87.The QoL a mean score for psychological health, independence, social relationship, and living environment is 4.11, 3.67, 3.76, and 4.05.

Mean of variables						
Variable	Mean					
Facility Management	3.87					
Psychological Health	4.11					
Independence	3.67					
Social Relationship	3.76					
Living Environment	4.05					

Table 1Mean of variable

Table 2	2
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Male students and years of study between variables								
Variables		Mean						
v allables	Year 1	Year 2	Year 3	Year 4	Total Mean			
Facility Management	3.67	3.88	3.50	3.63	3.67			
Psychological Health	4.17	3.97	3.82	3.95	3.98			
Independence	3.47	3.53	3.20	3.32	3.38			
Social Relationship	3.73	3.65	3.48	3.47	3.58			
Living Environment	4.10	3.92	3.62	3.72	3.84			

a) Uniqueness

Table 2 shows the analysis of years of study between variables within male students. The results show that for the variable 1 (psychological health), the highest mean value is 1^{st} years which is 4.17 and the lowest mean value is 3^{rd} years which is 3.82. Next, for variable 2 (independence), the highest mean value is 2^{nd} years which is 3.53 and the lowest mean value is 3^{rd} years which is 3.20. Other than that, the variable 3 (social relationship), the highest mean value is 1^{st} years which is 3.47. Lastly, variable 4 (living environment), the highest mean value is 1^{st} years which is 4.10 and the lowest mean value is 3^{rd} years which is 3.62.

From this research it shows that for variable 1 (psychological health) have homogeneous mean between year 2 (3.97) and year 4 (3.95). For variable 2 (Independence) there no homogeneous between the year. Other than that, for variable 3 (social relationship) have homogeneous mean between year 3 (3.48) and year 4 (3.47). Last but not least, variable 4 (living environment) there no homogeneous between year.

b) Ranking

			Т	able 2.a					
Ranking									
Variable	Years	Mean	Years	Mean	Years	Mean	Years	Mean	
	1		2		3		4		
Facility	4	3.67	3	3.88	3	3.50	3	3.63	
Management									
Psychological	1	4.17	1	3.97	1	3.82	1	3.95	
Health									
Independence	5	3.47	5	3.53	5	3.20	5	3.32	
Social	3	3.73	4	3.65	4	3.48	4	3.47	
Relationship									
Living	2	4.10	2	3.92	2	3.62	2	3.72	
Environment									

c) **Rationalization**

Table 2.a shows the facilities management have a greatest implication towards male students in terms of psychological health. It occurs probably due to male student have a low level of patience and a bit sensitive if a particular facility are not functioning well. In contrast, the third year male students acquire the lowest number of means for every variables. It is probably because they assume that facilities provided all around university's campus area are not adequate enough to serve their excitements and passions in terms of their needs and wants toward sport and recreational infrastructure.

		Table 5			
Female	students and	d years of stu	udy between	n variable	
Variables		Total Mean			
v allables	Year 1	Year 2	Year 3	Year 4	Total Meall
Facility Management	4.00	4.40	3.77	4.10	4.07
Psychological Health	4.07	4.47	4.30	4.17	4.25
Independence	4.08	4.45	3.70	3.62	3.96
Social Relationship	4.02	4.50	3.52	3.75	3.95
Living Environment	4.17	4.55	4.05	4.32	4.27

Table 3

Uniqueness a)

Table 3 shows the analysis of years of study between variable within female students. The results show that for the variable 1 (psychological health), the highest mean value is 2nd years which is 4.47 and the lowest mean value is 1st years which is 4.07. Next, for variable 2 (independence), the highest mean value is 2nd years which is 4.45 and the lowest mean value is 4th years which is 3.62. Other than that, the variable 3 (social relationship), the highest mean value is 2nd years which is 4.50 and the lowest mean value is 3rd years which is 3.52. Lastly, variable 4 (living environment), the highest mean value is 2nd years which is 4.55 and the lowest mean value is 3rd years which is 4.05.

b) Ranking

]	Table 3.a	l					
		Ranking								
Variable	Years	Mean	Years	Mean	Years	Mean	Years	Mean		
	1		2		3		4			
Facility	5	4.00	5	4.40	3	3.77	3	4.10		
Management										
Psychological	3	4.07	3	4.47	1	4.30	2	4.17		
Health										
Independence	2	4.08	4	4.45	4	3.70	5	3.62		
Social	4	4.02	2	4.50	5	3.52	4	3.75		
Relationship										
Living	1	4.17	1	4.55	2	4.05	1	4.32		
Environment										

c) Rationalization

Table 3.a shows, for the female students, the number of means for every years of study are differ from one another. It is probably because, for every variables it brought different interest and has its own importance for every female students. For the greatest implications, it is shown that living environment acquired the highest number and this is probably because female students are utilizing the facilities a bit more frequent than male students. In terms of years of study, female students in the third year, they probably encounter the highest problems compared to other year.

Table 4										
Overal	Overall mean male students and female students between variables									
Variables										
		Ma	le	(Overall		Fer	nale		Overall
Years	1	2	3	4	Mean	1	2	3	4	Mean
Facility	3.67	3.88	3.50	3.63	3.67	4.00	4.40	3.77	4.10	4.07
Management										
Psychological	4.17	3.97	3.82	3.95	3.98	4.07	4.47	4.30	4.17	4.25
Health										
Independence	3.47	3.53	3.20	3.32	3.38	4.08	4.45	3.70	3.62	3.96
Social	3.73	3.65	3.48	3.47	3.58	4.02	4.50	3.52	3.75	3.95
Relationship										
Living	4.10	3.92	3.62	3.72	3.84	4.17	4.55	4.05	4.32	4.27
Environment	. – •					. – .				

a) Uniqueness

Table 4 shows the overall mean male and female analysis between variables. The result shows that in variable 1 (psychological health) female is higher than male. For variable 2 which is independence also shows that female higher than male. For variable 3 which is social relationship also female higher than male. Last but not least, for living environment which is variables 4 shows that female higher than male.

b) Ranking

Table 4.a									
Variable	Male	Total Mean	Female	Total Mean					
Facility Management	3	3.67	3	4.07					
Psychological Health	1	3.98	2	4.25					
Independence	5	3.38	4	3.96					
Social Relationship	4	3.58	5	3.95					
Living Environment	2	3.84	1	4.27					

c) Rationalization

Table 4.a shows the level of excellence facility management does have a great implications toward its recipients or user. For the male students, it has a greater impact on their psychological health rather than female, which is living environment. This is probably because female students spending more of their time in the campus compared to male students.

As for the least effect, for male students, it is on their independency compared to female students, their social relationship. This occurs maybe because male students does not highly depends or use the facilities provided compared to female who are not utilize facilities for their social relationship purpose.

CONCLUSION

The findings of this study have proven that the positive relationship between FM in student residential hall on QoL in Universiti Utara Malaysia. This positive relationship shows that the FM has met the needs and wants of the respondents. In general, FM is crucial in order for any organization especially higher educational institution to achieve their vision and mission. Although it is always taken for granted by many organization, it is proven that excellent FM are capable in helping that particular company or organization, through many study carried out previously.

These researches are one of the many proofs for a good FM towards serving and deliver a high value towards the recipients. As this research begins and reaching the end, we found out that certain variables are compulsory and obligated toward managing the facilities well. In this research itself, we emphasize on certain variable in order for a good quality of life of Universiti Utara Malaysia's students.

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