The Relationships Between Facility Service Quality and Quality of Life Levels Among Projek Perumahan Rakyat (PPR) Residents in Subang, Selangor

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Abstract: In some residential neighbourhoods, facility management can have an impact on residents' quality of life (QoL) by upholding the standard of the facilities offered. In order to ensure that the residents' quality of life is met, it is crucial that management is effective in preserving the facility's quality. Damage to amenities like building elevators in the PPR region has put inhabitants through a lot of hardship and worry and has turned into a significant issue in the residential area, particularly in the PPR housing scheme. The residents' quality of life was impacted by this issue due to PPR's inadequate management in maintaining the standard of facilities offered. In order to determine the facilities' quality in PPR and to analyse how it affects inhabitants' quality of life, a study was done to evaluate the facilities' quality. A total of 93 responses were gathered quantitatively and analysed using descriptive, factor, and regression analysis based on the SERVQUAL component and the quality of life (QoL) component, which are two defined variables. According to the study's findings, some of the PPR's facilities are in excellent shape while others are on the verge of collapse. The findings of this study also revealed that, while one SERVQUAL component had no effect on residents' satisfaction in the study area, the other four SERVQUAL components did.

Keywords: Facilities Service Quality, Quality of Life, Projek Perumahan Rakyat.

1. Introduction

The quality of life of a home's occupants is significantly improved through facility management. According to Douglas (1996), a building's performance can be evaluated by taking a close look at how its facilities are managed. In a building, facility management also serves as a coordinator for administrative tasks aimed at bridging the gap between individuals and their physical workspace or place of use.

In contrast to the size of the unit or the proximity to the shared property, Liu (1999) asserts that communally enjoyable living is a more significant factor for the occupants of the home. The management and upkeep of the housing, such as the elevator or parking facilities, are included in the concept of housing satisfaction. Tawil et al. (2012) claim that a management body is necessary to oversee and maintain all aspects of a structure, including parking spaces, walkways, common areas, corridors, and other public amenities in a residential complex. Additionally, prospective homebuyers are increasingly focused on purchasing properties that come with amenities like covered parking, swimming pools, landscaped gardens, and private places in order to improve their quality of life (Ta, 2006). The key factor in guaranteeing the tenants' quality of life is the efficacy of facilities management for strata dwellings. This is supported by Zaki & Manaf (2021), who noted that strata building management that is at a moderate level has to improve management in order to meet resident satisfaction and enhance the quality of life of the home's occupants. Additionally, the degree of dependency on having one's wants supplied in a satisfactory manner can be used to gauge an individual's quality of life (Osman, 2018).

To ensure that a building can function well and that the facilities supplied can be used well throughout time, quality building maintenance is crucial. PPR's construction, which began in 1998 with a total of 52,496 units proposed for construction, is intended to assist low-income groups, particularly slum groups, in purchasing or renting homes at lower monthly rental rates or selling prices as well as to enhance the general quality of life of the populace (N.A, 2018). However, upkeep issues plague the majority of PPR homes.

As much as 60% of PPR in the state of Selangor, according to a news report by Yap (2016), have maintenance issues such elevator problems, leaking roofs, clogged pipelines, and uncontrolled rubbish problems. The problems that can be linked between the degree of quality of facility management and the quality of life are that residents' quality of life will be impacted by subpar facility management. One example of a concern that can be identified is the issue of elevator damage, which frequently occurs and has put PPR inhabitants under stress (Yatim, 2021).

Unsatisfactory elevator issues are another issue with facilities that PPR is frequently linked to. According to Fazrik Kamarudin's article in the Berita Harian newspaper from 2019 about the elevator issue at PPR, the issue with the elevator brake not working resulted in the occurrence of the elevator launching. Because the elevator given by PPR is over ten years old, despite the fact that maintenance has been performed, the elevator is still in an unacceptable state. Since they cannot fully utilise, the services offered and because it does not cover the maintenance expenditures that have been incurred by the PPR residents themselves, this maintenance issue, which frequently arises and is poorly managed, has reduced the quality of life for residents of PPR. Rajamanickam (2021) claims that when complaints are made, repairs for things like malfunctioning elevators are frequently postponed or completed. Additionally, as a result of subpar facility repairs, repaired facilities also do not persist for very long and will eventually be destroyed again. Therefore, the focus of the studies is to identify the level of facility management quality and to analyse the relationship between the quality of facility management and the happiness levels among residents at PPR Lembah Subang 2, Selangor.

2. Literature Review

Service quality includes several main components that can be used in measuring the level of service quality provided in a residential area, for example from the maintenance aspect of a building. Good service quality has a positive impact on a managed building and also on the occupants or users of the building. In terms of quality of life, the quality-of-life index has become the main pillar in measuring the level of happiness and well-being of society in Malaysia. For instance, Lai et al. (2022) explains the significance of facilities management to health centres. This is so because the study's findings indicate a correlation between the Key Performance Indicators (KPIs) for the particular health centre and the management of facilities like elevators and fire systems. As a result, it is possible to draw the conclusion that effective facility management can ensure the provision of high-quality service facilities in a residential complex.

Facility management (FM), which includes a facility manager, is a body or organisation responsible for overseeing the management of a structure and the services offered in a dwelling. Arifin et al. (2022) summarise the field of FM as a body that develops or supports an organization's main business by offering a secure, effective, and efficient environment for that business to operate in. There are various further definitions for FM. Additionally, because it can ensure users' comfort and welfare, facility management is essential for giving them high-quality care for their facilities.

Mohit & Azim (2012) conducted a study on the level of services and public amenities in residential areas, which demonstrates how important these two factors are to residents' overall satisfaction. Through residential satisfaction data for this study, the findings of his research demonstrate that residents are happy with the calibre of services offered to them, such as maintenance or cleaning services and public facilities. According to the research, residents' levels of happiness in residential areas are more influenced by the standard of service and the availability of facilities than by the state of the inhabitants' actual housing units.

Puteh (2014) claims that the development of the SERVUAL model for the management service component may be evaluated by taking into account five key factors: responsiveness, reliability, tangibles, assurance, and empathy that can be provided to the management service user. Each of the aforementioned elements has a definition that can be used to define service quality. The following is a definition of each SERVQUAL component: -

(a) Responsive Rate

Employee responsiveness is the capacity to assist clients and render prompt assistance to users (Parasuraman et al., 1985).

(b) Reliability

The capacity to provide clients with the promised services promptly, precisely, and satisfactorily is referred to as reliability (Parasuraman et al., 1985).

(c) Tangible Properties

The appearance of a facility with usable physical facilities, tools, or communication tools is an example of tangible property (Parasuraman et al., 1985).

(d) Guarantees

Assurance is the knowledge, skill, moral character, and faith placed in personnel. It also refers to protection from danger, uncertainty, and risk (Parasuraman et al., 1985).

(e) Empathy

Empathy or empathy has a definition as the attention or caring attitude of a firm towards their customers and also involves an understanding of customer needs (Parasuraman et al., 1985).

2.1 Quality of life

The physical housing environment, which includes the amenities and tools offered in a housing area, is the housing component that contributes to pleasure or well-being. Additionally, there is a strong correlation between residents' quality of life and the housing satisfaction component, particularly for people who live in strata dwellings. According to Sholehah et al. (2020), the primary component that influences a person's quality of life is housing satisfaction, which includes the residents of a home's response or feedback to their housing, whether positive or negative. The level of quality of life is, however, influenced by a number of factors, such as the housing market and economic conditions.

When measuring the level of quality of life in the housing environment, there are two factors that are used: physical factors, which include indicators of safety, facilities, and travelling between different locations (commuting), and social factors, which involve indicators of neighbourhood satisfaction. Economic factors also involve indicators of income levels (Lee, 2021).

3. Methodology

This research has three main stages.

(a) Stage One

By defining the issue that will be studied, the first stage of the process gets started. Problem statements are created by recognising problems or issues seen on websites, in news articles, or in newspapers. To make it easier to develop research questions and study objectives, the identified challenges are covered in the problem description in more detail. The primary difficulty that arises in PPR—frequent facility issues—forms the basis of the study's goal. The researcher also discovered a connection between resident quality of life and facility issues. The second goal of the study is to determine whether there is a connection between residents' quality of life and the quality of the facilities. The statistical package system for social sciences (SPSS) will be utilised as the study methodology to analyse the data that will be gathered. A theoretical framework that focuses on the interaction between the two elements has been developed through data analysis between two variables, namely the level of facility quality and the quality of life of the inhabitants.

(b) Stage Two

The researcher defined five quality service indicators in the second stage that can be used to gauge the standard of facilities in the study area and to analyse data in order to meet the study's goals. The researcher employed a quantitative approach that incorporated a questionnaire and a total of 100 respondents in order to meet the predetermined research objectives. Frequency analysis, descriptive analysis, and factor analysis have all been utilised as research tools to analyse the data in order to find meaningful values for each enumerated aspect of quality service. As an outcome of the analysis that was done, the researcher was able to determine the significant worth of each pertinent component for each facility that was offered in the study region.

(c) Stage Three

In order to accomplish the study's second purpose, the researcher must identify the elements of quality of life as a whole in the third step, which entails dissecting it into various components. Research on the website and earlier studies done by other researchers that demonstrate that quality of life as a

whole includes happiness and well-being are used to determine the components of quality of life. However, the researcher has decided to concentrate on the aspect of happiness based on dwelling options that meet the study's aims. Factor analysis and regression analysis are the research tools used. To determine whether significant values are pertinent for each facility to the degree of satisfaction of residents in the research area, regression analysis is utilised. The output of using this study tool was the discovery of relevant and irrelevant quality service components in determining the level of happiness of people in PPR Lembah Subang 2, Selangor.

Table 1: Overall research methodology

Objectives	Method	Variables	Tools	Output
To identify the level of facility quality in PPR Lembah Subang 2, Selangor.	Quantitatif method: (a) Questionnaire survey (b) 93 respondents involve.	SERVQUAL (a) Responsive Rate (b) Reliability (c) Tangible Properties	• Descriptive analysis	The tangible value of each SERVQUAL component on the quality of PPR facilities
To analyse the relationship between the quality of facilities and the quality of life of residents.		(d) Guarantees (e) Empathy Quality of life (a) Happiness levels	• Factor analysis • Multiple regression analysis • Correlation analysis	The relationship between the quality of facilities and the happiness of PPR residents.

4. Findings

Residents of the study area have responded to a series of inquiries about how well PPR Lembah Subang 2's facilities are rated. The SERVQUAL component of this study's statement question about service quality was then supplied to the participants. A total of 93 respondents responded to the distributed questionnaire, providing the data needed for this study. A total of 70 residents, or 75% of all respondents in the research region, participated in the survey, the majority of whom were female. Because this study comprised their personal judgement and experience of the facilities available in the study region, the feedback and opinions received were positive throughout.

4.1 Achieving Objective One

According to the descriptive data analysis performed, the Surau facility has a very high rating from locals and is in excellent shape. This is also demonstrated by Figure 1 below, which shows that Surau facilities have the highest mean value, 4.14. The closed camera system, on the other hand, is a feature of the building that the residents perceive to be in a state of devastation. This facility's mean value, 1.98, is the lowest of all the facilities when compared to other facilities.
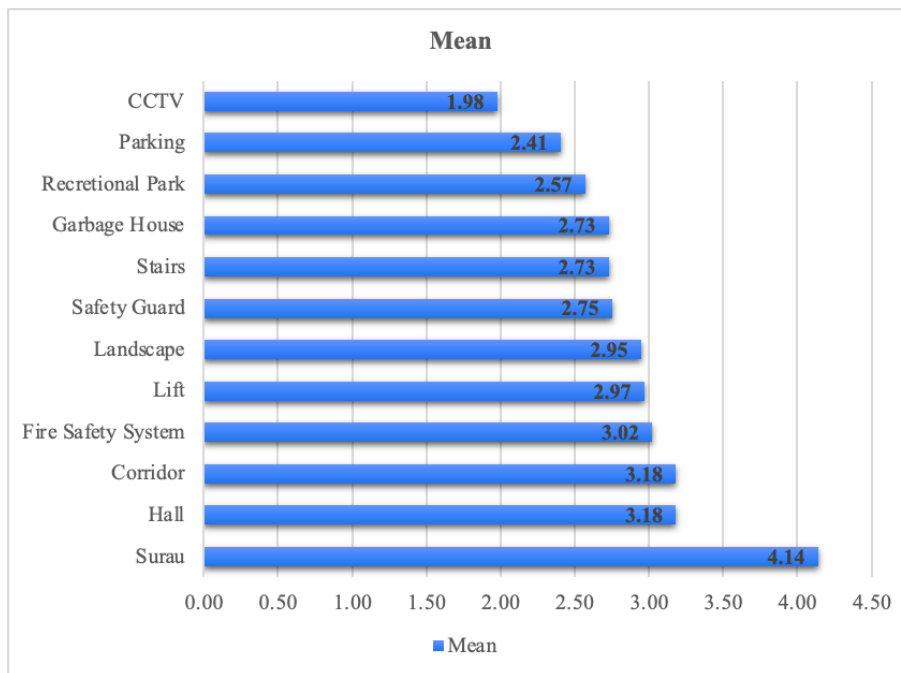
Figure 1: Mean results from descriptive analysis for facility quality

4.2 Achieving Objective Two

By segmenting the questions into the five SERVQUAL components that were employed in this study, a factor analysis of the questionnaire in part C was conducted in order to meet the study's objectives. For one responder, the average value of the quality assessment of each facility in the study region was used to calculate the residents' happiness levels, which was then coupled with the results of the factor analysis. Both of the analysis' outcomes were used in the regression analysis.

The mean value and standard deviation for each SERVQUAL component are displayed in the diagram below. The mean value of the response rate component is 2.88, while the standard deviation is 0.97. The reliability component's mean value was 1.85, the lowest of the five SERVQUAL components that were examined, and the standard deviation was 0.98. The tangible component has a mean value of 2.68 and a standard deviation of 0.93. Additionally, while the empathy component has the greatest mean value of 3.02 and the lowest standard deviation of 0.94, the assurance component has a value and standard deviation of 2.48 and 0.81.
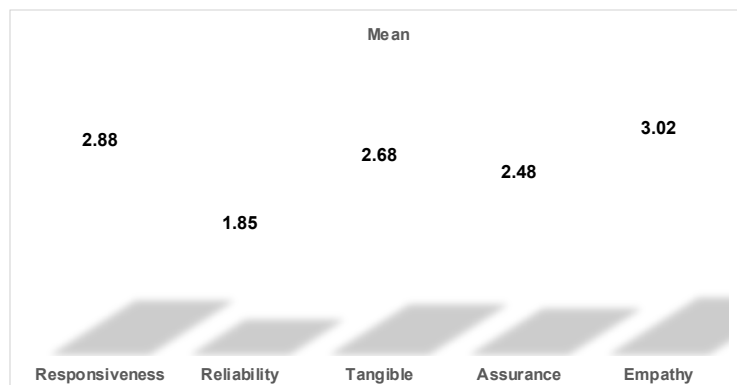

Figure 2: Factor analysis result through men comparison of SERVQUAL component

The data analysis revealed a link between the independent variable (IV), the SERVQUAL component for the study area's facility quality, and the dependent variable (DV), the inhabitants' happiness level, as shown in the table below. Because the P value (P-value) for the reliability component is > 0.05, the output from the analysis's results indicates that the independent variable (IV) has an inconsequential value (insignificant) for the reliability component (0.236). Conversely, the components with a significant value for the independent variable (DV) are the responsiveness rate (0.008), palpable nature (0.015), assurance (0.000), and empathy (0.000). Because the value for each component is less than 0.05, a meaningful value is allowed.

The results demonstrate whether the study area's residents' degree of satisfaction is influenced by the amenities' quality. In regard to that, the researcher was able to acquire results showing that four SERVQUAL components have an impact on residents' levels of happiness, whereas one component has no such impact. The P value or significant value, as shown in Table 2 below, can be used to determine whether a link is there. The input we've gotten indicates that reassurance and empathy are the factors that have the biggest impact on residents' happiness levels. This is due to the fact that these two factors concern communication, safety, and wellbeing inside the research region. This demonstrates the relevance of earlier research by Awang et al. (2022) about the provision of amenities to the community to ensure their well-being, and the theory may be applied based on the findings of this study.

Table 2: Multiple regression analysis result

Regression Statistics	
Multiple R	0.850
R Square	0.722
Adjusted R Square	0.706
Standard Error	0.336
Observations	93

ANOVA

	df	SS	MS	F	Significance F
Regression	5	25.523	5.105	45.266	0.000
Residual	87	9.811	0.113		
Total	92	35.334			

	Coefficients	Standard Error	t Stat	P-value
Intercept	0.891	0.144	6.187	0.000
Responsiveness	0.117	0.043	2.716	**0.008**
Reliability	-0.058	0.049	-1.193	0.236
Tangible	0.154	0.062	2.491	**0.015**
Assurance	0.289	0.061	4.766	**0.000**
Empathy	0.210	0.055	3.819	**0.000**

The tangible, assurance, and empathy components had positive correlation values with the SERVQUAL (IV) component and the happiness level (DV) of 0.736, 0.726, and 0.723, respectively. While the values are 0.522 and 0.525 for the two SERVQUAL components, namely responsiveness and reliability. All of the components are positively correlated with the DV variable, although three of them—tangibles, assurance, and empathy—are more positively correlated with DV than responsiveness and reliability, whose correlation value is closer to 1 (refer Table 3).

Table 3: Correlation analysis result

	Happiness Level	Responsiveness	Reliability	Tangible	Assurance	Empathy
Happiness Level	1					
Responsiveness	0.522	1				
Reliability	0.525	0.450	1			
Tangible	**0.736**	0.523	0.590	1		
Assurance	**0.726**	0.360	0.591	0.638	1	
Empathy	**0.723**	0.385	0.548	0.699	0.590	1

5. Conclusion

In conclusion, the researcher was successful in completing both of the planned research goals. The study's findings can also reveal a link between tenants' quality of life, particularly in terms of happiness, and the level of service that a housing management company provides. The four SERVQUAl factors that have an impact on PPR inhabitants' happiness suggest that they must be preserved in order for people to feel content and affluent while residing in the PPR. Therefore, inhabitants' pleasure in the house they live in is influenced by the level of decent facilities. In order to identify the elements that are significant for inhabitants in various places, the researcher expects that this study can be conducted in many PPR areas. In addition, future studies can also expand the scope of facility management studies.

Acknowledgement

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