

Determinants of Residential Satisfaction towards People Housing Programme at PPR Melana Indah (Fasa 1), Johor Bahru

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Abstract

Housing is a basic necessity for people in order to continue their daily life as well as to ensure well-being of the people, hence, good characteristics of housing are needed. In fulfilling the people's demand in the context of housing, Malaysian Government has come out with several public housing programmes. However, there are still issues arising, such as most of the public housing has low quality and insufficient public facilities. This paper assesses the residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru on several determinants which include dwelling features, facilities of the house and neighbourhood characteristics within the housing area and their contributions to residents' overall housing satisfaction. The data were collected through questionnaire to 341 respondents who resided in PPR Melana Indah (Fasa 1), Johor Bahru. In this study, the Statistical Package for Social Science (SPSS) version 22 has been used for data analysis. The findings from this study revealed that there is a relationship between dwelling features, facilities of the house and neighbourhood characteristics with residential satisfaction towards PPR Melana Indah Fasa 1, Johor Bahru with the Pearson correlation value of $r=0.645$, $r=0.461$ and $r=0.698$ respectively. Based on the findings of this study, it can be recommended for the Ministry of Housing and Local Government as well as Secretary of Johor Government's (Housing Division) to allow and encourage the participation and feedbacks from the public in order to improve the quality of housing in overall aspects.

Keywords: Residential Satisfaction, People Housing Programme, Neighbourhood Characteristics, Dwelling Features

INTRODUCTION

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Housing is the basic necessity for every human being along with good characteristics of housing; provided with the basic infrastructure, such as accessibility of roads and public transport, electricity and water supply as well as other basic needs that help people to upgrade their standard of living (Clement & Kayode, 2012). In Malaysia, many low and median income groups of people face problems with the high prices of houses and seek the government to provide them with affordable and quality housing. It was reported that in 2016, houses in Malaysia remain seriously unaffordable by international standards with a median multiple of 5.0. The maximum affordable house price in Malaysia is estimated to be RM282,000. However, actual median house price was

RM313,000, beyond the means of many households, where the median national household income is only RM5,228 (Bank Negara Malaysia, 2017). The housing affordability issue in Malaysia is largely due to the supply-demand mismatch and slower income growth (Bank Negara Malaysia, 2017). On the supply side, structural and cyclical factors in the housing market in Malaysia have resulted in a failure of the market to provide an adequate supply of affordable housing for the masses. Meanwhile, on the demand side, the growth in household income has not kept up with the increase of house prices.

Besides, the failure of the people to own or rent a house due to insufficient monthly income has resulted in the issue of squatters that have become critical. Subsequently, this is expected to become a recurring problem. Due to the high pricing issue of owning a house and the high rate of rent especially in urban areas, this has resulted in people being forced to build their own houses illegally. The unfortunate groups had no choice but to illegally build their houses at the squatter settlements despite the occurrence of various social problems and insufficient basic facilities at the area (Mania Tahsina & Arefeen Ibrahim, 2014).

In the context of housing in Malaysia, low-cost housing is an important housing category with one of its initial objectives is to resolve the squatter problem in urban areas such as in the city of Kuala Lumpur (Mohd Farid, Sudharshan, Tito Maulana & Wardah Fatimah, 2014). Therefore, the Malaysian government introduced the basic concept of a suitable house that should be provided to all the citizens, and that the house must be of high quality in terms of basic facilities and the layout. It must also have a good housing environment and the price of the house is affordable for the citizens especially for low income people (National Housing Policy, 2016).

According to the record, there were 102,000 affordable housing units completed for poor, low- and middle-income households during the 10th Malaysia Plan (EPU JPM, 2015). The completed housing units were implemented by several agencies for different targeted groups to ensure access to quality and affordable housing. Housing programmes such as Program Bantuan Rumah (PBR) and Program Perumahan Rakyat (PPR), which are run by different agencies and ministries, are designed specifically to attend the needs of the poor and low-income households in urban and rural areas (Shahrizal Shatar, Nooraini, Nor Ashikin & Zamri, 2017).

Despite the government's initiative in providing low cost houses for people can be considered as a reasonable effort, there are still issues and major problems arising with regards to the quality of the houses in low-cost public housing (Noraziah Wahi, Rosli Mohamad, Vikneswaran Munikanan, Ismail Mohamad & Syahrizan Junaini, 2018). It can be seen that the main factor that contributes to the success of the housing programme carried out by the government is whether the housing conditions and facilities meet the demands and expectations of the residents (Noraziah Wahi et al., 2018). Moreover, the lack of knowledge on the importance of having determinants on residential satisfaction contributes to the failure of the housing programme provided by the government (Noraziah Wahi et al., 2018).

According to the Kuala Lumpur Structure Plan 2020, the main issue in low cost housing is because of the the low qualities of building materials and workmanship (Ahmad Ezanee Hashim, Siti Aida Samikon, Nasyairi Mat Nasir & Normazwin Ismail, 2012). This was supported that several issues were also recognized related to low cost housing based on Kuala Lumpur Structure Plan 2020 which includes low space standards, under the provision of community facilities, shortage of car parking spaces, high maintenance costs and poor quality of construction and materials in low cost housing projects (Ahmad Ezanee Hashim et al., 2012).

It can also be considered that monitoring the physical condition of public housing building from time to time is crucial. Hence, the prompt and effective actions such as repairs and upgrades can be taken to ensure the high performance of public housing in order to guide the urban governance of the local authorities, towards the way ahead and to help in the monitoring of housing policy in the country (Ahmad Ezanee Hashim et al., 2012). The performance of public housing programme does not only rely on the number of units that have been completed by government, but also the satisfaction of residents in their units. Residential satisfaction reflects the degree to which individual housing needs are fulfilled. In this respect, this paper attempts to determine the factors that contribute to the residential satisfaction towards one of the People Housing Programme in Johor Bahru.

LITERATURE REVIEW

Residential Satisfaction

Residential satisfaction refers to the concept of determining the perspective and point of view from the residents of the house regarding the preferences and facilities that are provided by the developer (Ibem & Aduwo, 2013). In a simple understanding, residential satisfaction refers to the expression of a person about the expectation of the house with the actual condition of his house (Mohit, Mansor & Razidah, 2010). Residential satisfaction is an important indicator and benchmark for the architects, planners of the house and policy makers in planning the house with the housing features and facilities in order to meet the demands and needs of the people (Mohit et al., 2010).

Based on the survey done in one of the public housing areas in Hangzhou, China, the study has highlighted three major components in determining the housing satisfaction level of residents (Huang & Du, 2015). These significant components that show a strong relationship with the resident's satisfaction are housing features, house facilities and neighbourhood characteristics. Several studies done in public housing located in Lagos, Nigeria show that most of the residents in that area expressed their feelings on the housing characteristics as they were less satisfied with the house layout (Ibem & Aduwo, 2013). These studies have highlighted the issues of low quality public housing which needed serious attention from the government to overcome the problem. Therefore, in this study, residential satisfaction refers to the perspective and preferences among the residents of PPR Melana Indah (Fasa 1), Johor Bahru towards the performance and conditions of their house according to several factors and determinants.

Determinants of Residential Satisfaction

A previous study has also revealed that the primary determinants in determining residential housing satisfaction on housing is based on neighbourhood satisfaction, quality of management services, dwelling characteristics of the house, and accessibility with the necessary infrastructures and facilities (Aini Salleh, Aini Yusof, Abdul Ghani & Noraini Johari, 2011). In the context of residential satisfaction, it can be seen that an empirical study has proven that demographic factors contribute to the residential satisfaction such as education level, age, family composition, gender and level of income (Waziri, Nor'aini Yusof & Norazmawati Rahim, 2014). The number of

residents in a unit of house might affect the satisfaction among the residents towards their housing condition and environment. This was supported by a previous study done that stated a single or two persons household might show a higher level of satisfaction as compared with people who live with their families (Dekker, Sjoerd, Sako Musterd & Ronald Kempen, 2011).

Therefore, in this study, there have been several variables used in determining the residents' satisfaction towards People Housing Program in PPR Melana Indah (Fasa1), Johor Bahru, namely dwelling features of the house, facilities of the house and neighbourhood characteristics.

Dwelling Features of the House

Dwelling features of the house can be defined as the house's internal space and housing plan which includes the space for the living room, dining room, kitchen, drying areas for clothes, bathrooms, and also bedrooms for the residents (Mohit et al., 2010). Dwelling features is one of the criteria that needs to be stressed in measuring the residential satisfaction which includes the arrangement and design of bedrooms and living room, floor area, the quality of material used for the construction of the house, and internal facilities of the house (Alnsour & Hyasat, 2016). Generally, most of the studies done on the relationship of dwelling characteristics and housing satisfaction, show that most of the residents that are provided with better dwelling aspects are more satisfied rather than the residents provided with low dwelling aspects (Jansen, 2012).

Based on the study done in one of the public housing areas located in the city of Kuala Lumpur, it was found that dwelling characteristics especially the size of the house play an important factor that might affect residential satisfaction (Mohit et al., 2010). It can be seen that the satisfaction of the residents with the dwelling characteristics of the house concerning the size of the house is sufficient and comfortable for the families and household (Dekker et al., 2011). It was stated that, most of the residents feel more satisfied with the larger size and better structure and layout of the house (Huang & Du, 2015). This was supported by a study done in Dalian, China which stated that most of the residents are satisfied with a larger size of house that are provided for them (Chen, Zhang, Yang & Yu 2013).

Facilities of the House

Facilities of the house play an important role in ensuring the quality of the house and might contribute to the high satisfaction among the residents (Mohit et al., 2010). Facilities of the house concern the house's maintenance, dwelling units support services and public facilities provided by the management (Ibem & Aduwo, 2013). It was expected that the level of satisfaction among the residents would increase when the house is provided with the appropriate facilities and amenities (Waziri et al., 2014).

The ability of the management of the house in providing facilities and services to the residents has become one of the major determinants in influencing residential satisfaction in the low cost flat in Malaysia (Goh, Tee & Yahya, 2011). This was supported by the research done in one of the low cost flats in Kampung Muhibbah, Puchong. It was found that lack of accessibility of convenient shops in their flats and insufficient parking lots contribute to the high degree of dissatisfaction among residents (Goh et al., 2011).

Besides, it can be seen that housing facilities such as lift systems have strong influence in determining the performance and condition of the building, as well as contributing to the satisfaction level among the residents (Cheong Peng, Farhana & Aaina Mahassan, 2018). This finding was supported by the study done by Mohit et al., (2010) which indicated that housing satisfaction has a relationship with the housing building's maintenance services. Moreover, services and facilities provided for the house will support and ease the resident's daily activities, thus it will automatically influence the resident's high satisfaction towards their housing condition and facilities (Tan, 2012).

Neighbourhood Characteristics

The word "neighbourhood" can be understood in general as the bounded area used to develop housing. In the context of sustainable neighbourhoods, housing developers are urged to incorporate three dimensions of sustainability when planning and designing sustainable neighbourhoods and development projects. As highlighted by Sung (2007), housing developers and planners should build, maintain and manage their housing estates more efficiently in terms of efficient management of natural resources to achieve environmental sustainability. Additionally, housing developers should look into social harmony and provide a safe and healthy environment to their end users to

achieve social sustainability (Tan, 2016). Housing developers should also build a transit-oriented development with the integration of multiple transportation modes and a variety of amenities in the best way to meet the residents' requirements to achieve economic sustainability (Tan, 2016). Residents usually judge on the actual condition of the house and surrounding of their house and then compare them with their actual needs and desires (Hezzrin, Siti Hajar & Lukman 2017).

In the context of housing satisfaction, the accessibility to the basic facilities acts as important indicators in determining the quality of life of the residents (Leby & Hashim, 2010). According to Hawtin and Smith (2007), this concept can be understood as the house must be in close proximity to the facilities, public infrastructure, work and relatives (Hawtin & Smith, 2007). This statement was supported by a study conducted in Low-Cost Housing in Flat Bukit Kecil in the state of Terengganu, found that the satisfaction level among residents towards neighbourhood characteristics is high because there is an availability of shopping complex, health services, education services and police station in their housing area (Hezzrin et al., 2017).

Meanwhile, in terms of social context, neighbourhoods are often social communities with considerable face-to-face interaction amongst members (Tan, 2016). Hence, environments with open spaces within or around residential areas play an important role in the communication that works as residents interact with each other (Tyvimaa, 2011; Krellenberg et al., 2014; The Federal Town and Country Planning Development, 2010; Levy & Lee, 2011). Open spaces also encourage the interaction that benefits mental health as well as psychological advantages (Dawe & Millward, 2008). Accessible open spaces that are located near the residents' living area encourage residents to develop a habit of going there and developing a relationship with other residents (Lee & Chan, 2010).

In addition, a communal meeting place, such as a community hall, is essential for sustaining the relationship amongst residents in the neighbourhood. Community hall also acts as a meeting place for residents to gather and form a local improvement party for working on developing local facilities and services (Tan, 2008). As highlighted by Choguill (2008), a high level of engagement in the community hall meeting at the local level should be seen as the first step towards equal participation of civil and social activities in the neighbourhood. Therefore, people would prefer to spend more money

on buying or rent a house if the house has a positive image of neighbourhood characteristics (Tan, 2016).

METHODOLOGY

Research Design

A cross-sectional method was adopted in this study as it allows the researcher to collect the data just once from the targeted respondents. A cross-sectional study is very useful to be adopted in the study because it obtains the overall picture as it only explains and describes on what is happening in the moment in time, unlike longitudinal study (Ranjit Kumar, 2011). The data were collected within two weeks which started from 7th April until 20th April 2019 from the set of questionnaires that has been distributed to the residents in PPR Melana Indah (Fasa 1), Johor Bahru.

Subject of Study

The targeted respondents in this study were the people who live in PPR Melana Indah (Fasa 1), Johor Bahru. The significance of selecting this housing programme is because of several issues pertaining to the maintenance, quality and security issues. According to Johor Housing and Rural Development Committee, there are several issues received by Johor Government from residents who resided in PPR Melana Indah regarding the issue of lifts in each floor that does not function very well. On a regular weekly basis, it will break down at least three times (The Star, 2019). The other issues received by Johor Housing and Rural Development Committee is regarding the issue of motorcycle thefts that happened in a parking lot and also insufficient parking lots that required the residents to park their vehicles outside the residential area (The Star, 2019).

The total number of people in PPR Melana Indah (Fasa 1), Johor Bahru amounted to 3315 residents (Setiausaha Kerajaan Bahagian Perumahan Johor, 2019). Based on Krejcie and Morgan (1970), the sample size of the respondents is 341 respondents. This low cost housing consists of three blocks and the researcher had decided to distribute about 120 sets of questionnaires for each block. The total number of questionnaires that were distributed in PPR Melana Indah (Fasa 1) amounted to 360. However, only 341 questionnaires were successfully returned.

Sampling Technique

This study employed simple random sampling and the stratified sampling techniques. In stratified sampling technique, the study population was divided into sub-groups or also known as strata (Sekaran & Uma, 2003). The strata refers to the number of the blocks which are Block Nuri, Kenyalang and Block Kenari in PPR Melana Indah (Fasa 1), Johor Bahru, representing each of the resident's inhabitants.

Next, this study also adopted the Simple Random Sampling (SRS) technique. Simple Random Sampling refers to the method which each individual in the total population has equal chances to be chosen in the selection process to be included as the sample size of the study (Zikmund, 2003). The researcher has distributed the questionnaires according to the blocks in this low cost flat, which consists of three blocks. Each of the residents from these three blocks have chances to be chosen by the researcher as the respondents of this study. Hence, the questionnaires were distributed randomly for each block.

Measurement

In this study, Likert Scale was used as the measurement in the representation of the questionnaires. The Likert Scale was designed to identify how strongly subjects are satisfied or dissatisfied with the statements by using five-point scale, ranging from (1) very dissatisfied to (5) very satisfied, as part of the primary data collection. The questionnaires consisted of Section A (Demographic Profile of Respondents), Section B (Dwelling Features of the House), Section C (Facilities of the House), Section D (Neighbourhood Characteristics) and Section E (Residential Satisfaction).

Data Analysis

In this study, the data were analysed by using Statistical Package for Social Science (SPSS) version 23. Table 1 below represents the statistical technique used for this study in order to answer the objective of this study.

Table 1: Summary of Statistical Technique

Research Objective	Statistical Tehnique
RO 1 Is there any relationship between dwelling features of the house and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru?	Pearson Correlation
RO 2 Is there any relationship between facilities of the house and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru?	Pearson Correlation
RO 3 Is there any relationship between neighbourhood characteristics and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru?	Pearson Correlation

FINDINGS AND DISCUSSION

Table 2 below represents the result of a reliability test for all the independent variables and dependent variable with the total number of 341 respondents in this study. According to Nunnally (1978), the recommended value of Cronbach's Alpha considered good is that the value must be above 0.7. Based on Table 2, all the variables were reliable, namely between the range of 0.769 – 0.965 respectively.

Table 2: Reliability Analysis on the Residential Satisfaction towards People Housing Programme

Variables	Cronbach's Alpha	No. of items	Reliability
Dwelling features of the house	0.964	9	YES
Facilities of the house	0.769	4	YES
Neighbourhood characteristics	0.932	6	YES
Residential satisfaction	0.965	5	YES

In order to answer the first objective of this study, the hypotheses developed are as follows:

Ho: There is no relationship between dwelling features of the house and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru.

Hi: There is a relationship between dwelling features of the house and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru.

Table 3 represents the result of a correlation test between dwelling features of the house and residential satisfaction. It indicates that the value of $r = 0.645$ and the significant value of $p (0.000) < (0.05)$. There was a significant relationship between dwelling features of the house and residential satisfaction with the result of correlation indicates ($r = 0.645, p < 0.000$). If R-value is in the range of 0.5 – 1.0, it indicates that there is a strong relationship between an independent variable and dependent variable (Cohen, 1988). In this study, it can be concluded that there was a strong relationship between dwelling features of the house and residential satisfaction. Therefore, Hi is accepted in this study. This finding was supported by a study done in one of the public housings in the city of China. It was found that there was a strong relationship between dwelling characteristic for each unit of house with residential satisfaction (Xi Wenjia, 2018). The other aspect of dwelling features that has been examined in this study showed that there was a positive relationship between sizes of dining space with residential satisfaction (Xi Wenjia, 2018).

Table 3: Correlation Analysis for Dwelling Features of the House

Variables	P value (sig)	N	Pearson Correlation
Dwelling features of the house	0.000	341	0.645

The second set of hypotheses was developed as below in order to answer Research Objective 2:

Ho: There is no relationship between facilities of the house and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru.

Hi: There is a relationship between facilities of the house and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru.

According to Table 4 below, it shows the result of a correlation test between facilities of the house and residential satisfaction which indicates the value of $r = 0.461$. Meanwhile, the significant value indicates the p-value, $p(0.000) < (0.05)$. Hence, there was a significant relationship between the facilities of the house and residential satisfaction with ($r = 0.461, p < 0.000$). According to Cohen (1988), if the R-value is in the range of 0.3 – 0.49, it indicates there is a medium relationship between an independent variable and dependent variable. Hence, it can be concluded that the null hypothesis was to be rejected and the alternative hypothesis is accepted in this study as there was a medium relationship between facilities of the house and residential satisfaction. This has been supported by Mohit et al., (2010) that stated, facilities of the house acts as an important catalyst in ensuring the quality of the house as well as might contribute to the high level of satisfaction among residents. Facilities of the house include the services of housing maintenance, public facilities and dwelling units support service provided by the management and developer of the house (Ibem & Aduwo, 2013).

Table 4: Correlation Analysis for Facilities of the House

Variables	P value (sig)	N	Pearson Correlation
Facilities of the house	0.000	341	0.461

The final hypotheses have been developed as follows in order to answer Research Objective 3:

Ho: There is no relationship between neighbourhood characteristics and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru.

Hi: There is a relationship between neighbourhood characteristics and residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa 1), Johor Bahru.

Table 5 shows the result of correlation analysis between neighbourhood characteristics and residential satisfaction. The correlation test for an independent variable, namely neighbourhood characteristics and dependent variable which is residential satisfaction indicates the value of $r = 0.698$ and the significant value of $p, p(0.000) < (0.05)$. It can be considered that there was a significant relationship between neighbourhood characteristics and residential satisfaction with $r = .698 (p < 0.000)$.

According to Cohen (1988), if the value of r is in the range of 0.5-1.0, it shows that there is a strong relationship between an independent variable and dependent variable in this study. Therefore, the null hypothesis was rejected in order to accept an alternative hypothesis. As the result of this study, it indicates that there was a significant relationship between neighbourhood characteristic and residential satisfaction. This was supported by a study done in South Korea which indicates that the respondents showed a high level of satisfaction with the availability of neighbourhood characteristics including shopping complex, post office, banking facilities and health services (Ha, 2008).

Table 5: Correlation Analysis for Neighbourhood Characteristics

Variables	P value (sig)	N	Pearson Correlation
Neighbourhood characteristics	0.000	341	0.698

RECOMMENDATIONS AND CONCLUSION

Based on the findings, this study concludes that dwelling features of the house, facilities of the house and neighbourhood characteristics are the determinants of residential satisfaction towards People Housing Programme in PPR Melana Indah (Fasa1), Johor Bahru. This indicates that the residents in PPR Melana Indah are concerned on the overall performance and aspects in terms of housing features, facilities and quality in order to improve their quality of life. Besides, this also shows that residents of PPR Melana Indah (Fasa1), Johor Bahru will be more satisfied if the government and house developer can improve the quality of the house and provide with the relevant and necessary amenities.

Based on the findings of this study, it can be suggested to several parties responsible in providing low cost houses for residents. Therefore, for the future development of People Housing Programme in Johor, it can be recommended that the National Housing Department and Johor Government to collaborate together with the Secretary of Johor Government's (Housing Division) to identify the strategic location that has high accessibility to the basic facilities. This is because, if the location of the house is far from the basic facilities, particularly the healthcare services, police station, education centre, this will burden the residents. Building People Housing Programmes that are located strategically to main basic services would increase the level of

residential satisfaction towards People Housing Programme and most importantly, these help the public to have a better quality of life.

Furthermore, in order to increase the level of satisfaction among residents on the three determinants of residential satisfaction discussed in this study, it is suggested that the development of low cost housing needs participation and feedbacks from the public (Xi Wenjia, 2018). This means, the public have the rights to express their personal opinions and views with regard to the development of the house especially in the aspect of facilities and amenities within the housing area that are important to them. Therefore, engaging the public with the local councils for instance through town hall meeting series, distributing satisfaction survey or conducting focus group interviews are important steps before any decisions are reached to build a low cost housing project. This initiative might help to increase the satisfaction level among residents as they are the residents of the public housing.

Hence, this study was intended to provide important feedbacks for the Malaysian government and Secretary of Johor Government (Housing Division) in providing more quality public low-cost housing to the low income group that cannot afford to purchase a house at the market price. It is important for the authorities involved to provide sufficient public facilities that are built with high quality materials for the residents. It is hoped that this will increase the satisfaction level among the residents of the People Housing Programme in Malaysia.

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