

GADING (Online) Journal for Social Sciences, Universiti Teknologi MARA Cawangan Pahang
Vol 22 (Special Issue September) KONAKA 2018

Adequacy of Low-Cost Housing: A Study of the People's Housing Programme (PHP) at Kuala Lumpur

Wan Sumayyah Syahidah Wan Mohamad^{1*}, Noor Amira Syazwani Binti Abd Rahman²,
Mohd Rozaimy Bin Ridzuan³

¹⁻³ Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA Cawangan Pahang
Kampus Raub, 27600 Raub, Pahang, Malaysia

wansumayyah@uitm.edu.my, amirarahman@uitm.edu.my, rozaimy@uitm.edu.my

Abstract: The low cost housing is one of the contemporary challenges of most developing countries and it is assumed to be a perennial problem in some of these countries due to rapid population growth and urbanization. The adequacy, affordability and quality of houses are highlighted in the Eleventh Malaysian Plan (2016-2020). It reflects the political will of the government in elevating the standard of living of the citizens. This paper examines the adequacy of low-cost housing standards (public facilities, flat features, and social environment) among People's Housing Programmes (PHP) residents. The scope of this study pertains to the residents of PHP Kampung Limau, Pantai Dalam, Kuala Lumpur. The methodology employed in this research was cross-sectional by applying the convenience sampling technique for the identification of the units of analysis. The findings of the study show that the majority of the beneficiaries of low-cost housing programs scored a high mean for all the independent variables in this study. It is hoped that this study can be used as a yardstick to adopt new strategies as well as improving new building standards for low-cost housing, particularly in Malaysia and developing countries at large.

Keywords: Low-cost Housing, People's Housing Programme, Public Facilities, Flat Features, Social Environment

Introduction

Housing has become a core concern for the whole globe, considering housing as one of the greatest human requirements (Maslow's Needs Hierarchy, 1962). Without it, people cannot feel safe against danger or other external components of the environment. Happy, productive and fulfilling lives are therefore unattainable. Housing meets the physical requirements by offering extreme safety and shelter from extreme weather and climate while simultaneously fulfilling the psychological needs by providing a sense of personal space and privacy. In addition, housing is also a significant contributing industry to the economy of the country, where unique housing policies have been implemented by the government to provide affordable housing for every citizen.

Housing is described as shelter that protects people or residents from the external setting that impacts everyday life (Khair, 2015) and improves the quality of life of people (National Housing Policy, 2017). According to Evans and Johnson (2000), a house is described as a unit or a full physical structure with physical equipment such as water supply, electricity and other social facilities based on the main goals of defending families from accidents and injuries.

Meanwhile, Onibukun (1974) stated that the 'house' is a mixture of several main variables and these variables interrelate the private satisfaction of a homeowner with the facilities used in the residential unit.

Providing housing for low-income people, especially urban poor people, has always been a basic component of the housing policy of the state to maintain the country's constancy and fortune. The Malaysian government's commitment to provide its country with appropriate and accessible shelter was obviously reflected in the annual budget of the government and the Five Yearly Development Plans of the country (Ahmad et al., 2011). The primary concern of Malaysia's housing policies is to provide home-owned democracy for all its people, while eradicating the issue of hardcore poverty and urban squatters (Idrus et al., 2008). Under this core principle, the government and later the private

sector are delivering massive amounts of low-cost housing under various affordable housing schemes such as hardcore poor housing (PHPT), People's Housing Program (PHP), 1Malaysia Civil Servants Housing (PPA1 M), and Syarikat Perumahan Negara Berhad (SPNB) schemes.

Research Objectives

To accomplish the goal of studies, three main goals have been set. The goals are:

- RO1: To define the adequacy of public facilities in low-cost housing among People's Housing Programme (PHP) dwellers
- RO2: To classify the adequacy of flat features in low-cost housing among People's Housing Programme (PHP) dwellers
- RO3: To define the adequacy of social environment in low-cost housing among People's Housing Programme (PHP) dwellers

Literature Review

Reviewing the literature on low-cost housing conditions in Malaysia, which is the research region of this document, it is essential to note that only a few appropriate works have been recognized so far that have investigated Malaysia's low-cost housing. According to Asek (2007), low-cost housing was described as government programs aimed at helping Malaysian families with low incomes (those with monthly incomes of RM1500 and below) to access housing. However, low-cost housing is a program aimed at providing adequate housing for low-income households by implementing integrated projects and it argues that these programs should be linked to public services in order to generate adequate growth and a stable life for people (Eleventh Malaysia Plan, 2016-2020). On the other side, low-cost housing in Salfarina et al. (2010) indicated that offering fundamental services to low-income people through low-cost housing policies has helped improve their condition.

Public Facilities

The normal provision in low-cost housing facilities and utilities such as playground for children, reading rooms, community amenities, and open space are insufficient to satisfy residents' requirements. One of the major issues is the insufficient parking area, which has led to associated issues such as illegal roadside parking and obstruction of traffic (Kuala Lumpur Structure Plan 2020, 2004). In addition, Hafazah (2008) also discovered that many kinds of amenities were accessible in Shah Alam and Klang's low-cost housing study. These are community facilities needed to meet the requirements of the community's daily lives without which residents' well-being will be compromised. Nearly all facilities were accessible in low-cost housing in Shah Alam compared to low-cost housing in Klang, which lacked infrastructure such as high school, playground, public clinic, community hall, and mosque. In this research, Shah Alam's low-cost housing had more kinds of equipment than Klang's low-cost housing. Shah Alam's low-cost housing has shown that the neighborhood idea can provide community infrastructure for individuals in the neighborhood while Klang's low-cost housing is not constructed according to the idea of the neighborhood.

Flat Features

Previous low-cost housing program limited a single or two-bedroom dwelling unit only (Asek, 2007). Latest low-cost houses have risen the amount of bedrooms to three, thus enabling lower-income group living circumstances to be upgraded. In Malaysia, low-cost housing layout has experienced modifications from two to three bedrooms with an extra dining room, a distinct toilet and bathroom, and a drying zone (Construction Industrial Development Board (CIDB), 1998). The flat characteristics of low-cost housing are based at 60 to 63 square meters per unit on a nationwide basis. The norms however, are still below those of other advanced or developing nations. A study carried out by Zainal et al. (2012) in terms of layout, a low-cost house in Malaysia must have a built-up area of 550 to 660 square feet, two bedrooms, a living room, a kitchen and a bathroom indicated in the minimum standard. However, there are generally five members in a typical Malaysian family or

household, including an adult male, an adult woman, and three kids (Nair, 2011). This creates occupancy by room or space between two and six individuals (Sikod, 2001). This situation generates comfort and privacy issues for a family with more than four members.

Social Environment

It is said that housing environment that impacts the social elements of inhabitants impacts housing satisfaction in terms of noise, crime rate, accidents and levels of safety as well as community interactions. There are obviously both physical and social elements of housing satisfaction (Karim, 2012). Traffic safety and crime are also linked to satisfaction with housing. Inadequate community facilities, such as vandalism and hiking crime rate, can lead to social illness in the residence. Community organizations can improve satisfaction by enhancing communication and interaction and by setting a common purpose for the residents. Understanding the social environment in the residential region will provide data about the adverse effects of the social environment on the satisfaction of citizens with their homes. In addition, according to Yahya and Hashim (2004), KLCH's low-cost residential inhabitants were usually happy with their residential situation and environment. Friendly neighborhood situation adds most to the satisfaction of inhabitants among the predictor factors that add to general residential satisfaction. Lu (1999) ; Alison et al. (2000), it was observed that the neighborhood was an significant factor in satisfying housing.

Research Methodology

The primary research used quantitative approach to gather information where the questionnaire survey technique was used in this research. The primary aim of using the quantitative method is due to the big amount of participants engaged in this research, 341 respondents representing all households correctly. Data was gathered through the survey questionnaire for this purpose. The questionnaires were administered personally.

Findings

This chapter discusses two kinds of descriptive assessment. It starts with respondent profile that describes respondent characteristics. Responses were then given across independent variables to determine the adequacy of low-cost housing (public facilities, flat features, and social environment).

Profile of Respondents

This study's respondents included PHP Kampung Limau residents, Pantai Dalam, Kuala Lumpur. A total of 350 questionnaires have been distributed to the respondents in this research. During collection, all 350 were returned ; however, only 341 were used for the research. Some of the respondents were approached personally about the purpose of the questionnaires and the researcher had the chance to briefly explain the questionnaire and at the same time waited for answers from the respondents. Appropriate tables have been used to analyze the information in order to make it easy to understand. The information were viewed in both the respondents percentage and frequency.

Table 1.1 Profile of Respondents

Items		N=341	
		Frequency	Valid Percentage (%)
Gender	Male	160	46.9

	Female	181	53.1
	Total	341	100
<hr/>			
Age	<20	6	1.8
	21-30	54	15.9
	31-40	86	25.2
	41-50	93	27.2
	>50	102	29.9
	Total	341	100
<hr/>			
Length of residency in	1 year	4	1.2
PHP	2 year	5	1.5
	3 year	16	4.7
	4 year	18	5.3
	5 year	48	14.1
	6 year	60	17.6
	7 year	190	55.7
	Total	341	100
<hr/>			
Race	Malay	265	77.7
	Chinese	45	13.2
	Indian	31	9.1
	Others	-	-
	Total	341	100
<hr/>			
Number of family	2	23	6.7
member	3	27	7.9

	4	80	23.5
	5	76	22.3
	6	73	21.4
	7	24	7.0
	8	2	0.6
	9	19	5.6
	10	6	1.8
	13	11	3.2
	Total	341	100
<hr/>			
Monthly family income	<RM1000	52	26.3
	1001-2000	141	57.5
	2001-3000	92	12.3
	3001-4000	24	2.6
	<RM4001	21	1.5
	Total	341	100
<hr/>			
Occupational	Government	24	7.0
	Private	131	38.4
	Self employed	124	36.4
	Others	62	18.2
	Total	341	100
<hr/>			
Vehicle owned	Motorcycle	104	30.5
	Car	84	24.6
	Car and motorcycle	94	27.6

	None	59	17.3
	Total	341	100
Property's ownership	Rented	258	75.7
status	Owned	83	24.3
	Total	341	100

This research includes PHP Kampung Limau, Pantai Dalam, Kuala Lumpur residents. Demographic issues include gender, age, length of residency in PHP, ethnicity, number of family members, monthly family income, occupational, car owned status, and ownership status of property.

Table 1.1 shows that 46.9% (160) of the participants were men and 53.1% (181) were females. In terms of ethnicity, Malay was 77% (265), Chinese was 13.2% (45), and Indian was 9.1% (31). The distinction could be due to relocation practice and the fact that with the implementation of a new economic policy, more Malays became squatters, that urged them to live in urban areas without taking care of their housing demands by the government (Asek, 2007). The distinction could also be due to the location of the research, which is PHP Kampung Limau.

In terms of age, 17.7 percent (60) of 341 participants were between the ages of 30 and below, while the age range of 31-50 years was between 52.4 percent (179) of respondents and 29.9 percent (102) of respondents were above 51 years. The age of 40 years and below was 42.9 percent (146). In the future they were among the potential buyers of the house.

From 341 participants who responded to the questionnaire, more than 57.5% (141) had monthly revenue below RM 2000 per month and 26.3% (52) had monthly revenue below RM 1000. That implies they were capable of renting or buying low-cost housing. 16.4% (137) of respondents had a monthly revenue of more than RM 3000. If KLCH strictly adhered to the laws and regulations, this quantity of revenue could automatically disqualify one from renting or purchasing low-cost housing.

Most respondents worked in the private sector, 38.4 percent (131). It thus demonstrates the attitude of employers in the private sector to relieve their obligation to provide their staff with accommodation. Only 7.0 percent (24) were self-employed in public facilities, around 36.4 percent (124), and the remaining 18.2 percent (62) worked elsewhere.

Other than that, less than three years remained about 7.4 percent (25) in the PHP. Approximately 19.4% (66) remained four to five years in PHP. 17.6 percent (60) of respondents who remained in PHP for 6 years. For seven years, the remainder of the respondents remained in PHP, which was 55.7% (190).

A total of 60.4% (206) of respondents stayed in the house with less than five family members, while 39.6% (135) stayed in the house with more than six family members. The research discovered that with other households there are some inhabitants sharing homes. This will lead to discontent with the availability of accommodation services. To appreciate the services and amenities supplied, as indicated by the domestic average, there must be four members per household.

Out of 341 respondents who responded to the questionnaire, approximately 30.5% (104) owned motorcycles and 24.6% (84) owned a vehicle. While the vehicle and motorcycle owned 27.6 percent (94) of respondents. There were 17.3% (59) of respondents who had no car in their possession.

A total of 75.7% (258) leased their homes and 24.3% (83) owned their former homes. These were not homeless people.

Responses Across Independent and Dependent Variables

This section of this study will discuss the adequacy of low-cost housing which pertains to public facilities, flat features, and social environment among PHP dwellers. This is based on the responses from the respondent who enjoyed the standards of housing as stated in Ministry of Housing and Local Government Guidelines. This section also presents the result on the level of adequacy of low-cost

housing, which include public facilities, flat features, and social environment among PHP residents. Table 1.2, Table 1.3 and Table 1.4 show the evaluation of standards of low-cost housing.

Evaluation of Public Facilities

Table 1.2 shows the condition or standard level of low-cost housing in this field. The mean value ranges from 1 (extremely dissatisfied) to 5 (extremely satisfied) based on the Likert Scale in the questionnaire. Based on the statistical findings, the level of low-cost housing's residents towards the public facilities is moderate (M= 3.36; Std. Dev.= 0.48).

Table 1.2 Evaluation of Public Facilities

Public Facilities	Mean Score	Indicator
Preschool facility	3.98	Extremely Satisfied
Distance to primary school	3.21	Neutral
Distance to secondary school	3.02	Neutral
Public phone facility	3.26	Neutral
Children's playground facility	3.45	Satisfied
Distance to get public transport like bus, taxi, LRT	2.94	Neutral
Parking lot facility	2.76	Neutral
Adequate parking lot	2.36	Dissatisfied
Distance to mosque, temple and church	4.14	Satisfied
Community hall facility	4.07	Satisfied
Facilities for handicapped	3.36	Neutral
Distance to buy basic necessities facility like groceries store, super market	3.69	Satisfied
Distance to clinic and hospital	3.45	Satisfied
Total	3.36	Neutral

For the first question, most of the respondents 251 (73.6%) were satisfied with the preschool facility. From the observation, there was *Tabika KEMAS* provided by the federal government located at the ground floor of residential area. Question number 2 and 3 were regarding the distance to primary school and secondary school. 179 (52.5%) of the respondents were satisfied and 115 (33.7%) were dissatisfied with distance to primary school. 130 (38.1%) were satisfied and 138 (40.5%) were

dissatisfied with distance to secondary school. There was average number with this distance. This is due to the location that was quite far from their residential area but the school was easy to access as there was high availability of school buses.

In question number 4 on public phone facility, 183 (53.7%) of the respondents were satisfied while 17 (5%) were extremely dissatisfied. From the observation, the respondents were satisfied because there were a number of public phone provided at the residential area. However, the respondents did not frequently use the public phone since nowadays everyone has smart phones. Children's playground facility as stated in number 5 indicates that 197 of respondents (57.8%) were satisfied and 7 (2.1%) were extremely dissatisfied. The children's playground was located at the open space in the residential area. From the observation, the equipment was well maintained.

Question number 6 indicates that 157 (46%) of the respondents were dissatisfied with the distance between the flats to the nearest public transport such as bus, taxi, and LRT. This is because the respondents had to walk quite far in order to reach the LRT. Some of the respondents could not afford to rent a taxi so they had to wait for a bus. Moreover, in question number 7, 160 (46.9%) of the respondents were dissatisfied with parking lot facilities and in question 8, 190 (55.7%) of respondents were dissatisfied with the adequacy of parking lot. Parking lots provided were limited and most of the respondents owned a car. From the observation, there were at least two cars per family. With the ratio, definitely the parking lot provided were not enough. The residents had to double-park their cars and this caused an untidy environment. Besides, not all units of houses in that area were provided with the parking space. Question number 9 is distance between the flats to mosque, temple, and church. Almost all of the respondents were satisfied with the distance between the flats to mosque, temple, and church. It shows that 176 (51.6%) of respondents were satisfied and 127 (37.2%) were extremely satisfied. For Muslim residents, the mosque is located at the open space of residential area. Besides, the mosque is available for Friday Prayer. While for non-Muslim the nearest temple located at Kampung Pasir and church located at Brickfields.

In question 10, 169 (49.6%) of the residents were satisfied and 111 (32.6%) respondents were extremely satisfied with the community hall facility. This number shows almost all of the residents satisfied with the community hall provided. The community hall located at the ground floor of the residential area. There were a number of activities such as marriage ceremonies and big social function such as Housing Committee (*Jawatan Kuasa Kemajuan dan Keselamatan Kampung*) meeting held at the hall. For question number 11, 141 (41.3%) of the respondents were satisfied and 22 (6.5%) were extremely dissatisfied with facilities for handicapped. There were facilities provided for handicapped like parking lot, the special Braille on the lift button and route.

Moreover, question number 12 shows almost all of the respondents 200 (58.7%) were satisfied with the distance to buy the necessities like groceries store and supermarket. From the observation during questionnaire distribution, there were grocery stores located at the ground floor. The grocery stores sold basic daily necessities such as cooking gas, wet, and dry stuffs. Besides, the nearest shopping malls were the Mid Valley Megamall and NU Central; hence, it is easier for the residents to obtain the basic necessities. Lastly, in terms of distance to the nearest clinic and hospital, 157 (46%) of the respondents were satisfied. The nearest clinics provided by federal government were *Klinik Kesihatan Ibu dan Anak Pantai Indah* and *Pusat Kesihatan Lembah Pantai*. While the nearest hospital is *Pusat Perubatan Universiti Malaya*.

Evaluation of Flat Features

Table 1.3 shows the condition or standard level of low-cost housing in this field. The mean value ranges from 1 (extremely dissatisfied) to 5 (extremely satisfied) based on the Likert scale in the questionnaire. The low-cost housing adequacy which covers flat features provided in the Table 4.9 indicates the moderate level of satisfaction towards flat features among the residents ($M= 3.37$; Std. Dev. = 0.51) in which 3.37 represents neutral (either satisfied or dissatisfied) according to the scale.

Table 1.3 Evaluation of Flat Features

Flat Features	Mean Score	Indicator
Space in the living room	3.80	Satisfied
Space in the kitchen	3.30	Satisfied
Space for dining	2.71	Neutral
Space in bedroom	3.68	Satisfied
Adequate bedroom	3.69	Satisfied
Space in toilet	3.67	Satisfied
Adequate toilet	3.86	Satisfied
Room arrangement	3.80	Satisfied
Air circulation	3.84	Satisfied
Number of plug/ electrical socket outlets	3.36	Neural
Sink height	3.83	Satisfied
Clothes line facility	2.17	Dissatisfied
Steps facility	3.21	Neutral
Lift facility	2.31	Dissatisfied
Total	3.37	Neutral

In the first question, almost all the respondents 239 (70.1%) were satisfied with the space in the living room. The space in the living room is 24.91 m². From the observation, the living room can accommodate sofa set. For question 2, almost all of respondents 203 (59.5%) were satisfied with the kitchen space. The space for kitchen is 4.5 m². Question number 3 regarding space for dining. 114 of respondents (33.4%) were satisfied and 124 of respondents (36.4%) were dissatisfied with space for dining. The reasons for dissatisfaction among the respondents are because of the living room and dining room being combined into one space.

In question 4 as regard to bedroom space, almost all of respondents, 254 respondents, (74.5%) of respondents were satisfied. The space for master bedroom is 11.7 m². The space for second bedroom is 9.9 m² and the space for third bedroom is 7.2 m². Question 5 indicates that most respondents of respondents were satisfied and thought that the numbers of bedrooms are adequate; 241 of respondents (70.7%) were satisfied and only 3 (0.9%) were extremely dissatisfied.

Question number 6 indicates that 241 (70.7%) of the respondents were satisfied and only 17 (5%) of respondents were neutral either they satisfied or not satisfied with toilet space. The toilet was provided separately with the bathroom. The space for toilet and bathroom is 1.8 m² each. Moreover, question number 7 indicates almost all respondents (255) 74.8% were satisfied with the number of

toilet provided. Since the toilet and bathroom were separately provided, it is enough to accommodate the residents during morning time where everyone is busy to prepare themselves to go to work or school.

In question number 8, almost all of respondents, 255 (74.8%), were satisfied. For air circulation in question number 9, 269 (78.9%) of respondents were satisfied. From the observation during questionnaire distribution, there were windows in each house. Question number 10, 193 (56.6%) of the residents were found to be satisfied while only 6 (1.8%) of respondents were extremely dissatisfied with the number of plug or electrical socket outlets available. The number of plug or electrical socket outlet provided was adequate. Question number 11 shows that almost all of respondents 251 (73.6%) were satisfied with the height and sink position.

Question number 12 is regarding the clothes line facility. 111 (32.6%) of respondents were dissatisfied and 128 (37.5%) were extremely dissatisfied. Based on the observation, the residents needed to dry their clothes at unsuitable places such as the balcony. Due to this situation, the water drops from the clothes resulted in arguments and fights between the residents. In the question number 13, 118 of the respondents (3.6%) were dissatisfied with the ladder facility. The stairs were not well maintained where they were filled with a lot of rubbish and dust. For the last question is in term of lift facility, in which 169 (49.6%) of respondents were dissatisfied and 11 (3.2%) of the respondents were extremely satisfied. This is because the number of lift to accommodate 18 floors of housing was only two. Besides, the space of the lift was too small. The lifts could not support the big number of users especially during peak hours. If one of the lifts breaks down, it will create difficulties to the residents.

Evaluation of Social Environment

Table 1.4 shows the condition or standard level of low-cost housing in this field. The mean value ranges from 1 (extremely dissatisfied) to 5 (extremely satisfied) based on the five points Likert scale in the questionnaire. The low-cost housing adequacy which is social environment provided in the table indicates the moderate level of satisfaction towards the social environment ($M = 3.50$; Std. Dev. = 0.65).

Table 1.4 Evaluation of Social Environment

Social Environment	Mean Score	Indicator
Noise level between neighbourhood	3.21	Neutral
Accident situation	3.69	Satisfied
Crime situation	2.76	Neutral
Security control	3.05	Neutral
Community relations	3.92	Satisfied
Neighbourhood relations	3.94	Satisfied
Traffic situation	3.12	Neutral
Society activities	3.95	Satisfied
Resident club	3.87	Satisfied

Total

3.50

Satisfied

Based on the statistical findings for question number 1, 139 (40.8%) of respondents were satisfied and 106 of the respondents (31.1%) were dissatisfied with the noisy environment in the neighbourhood. For question number 2, 210 of the respondents (61.6%) were satisfied with the accident situation¹. Overall, residents were satisfied with the situation where accidents did not happen in their residential area.

For question number 3, 166 of the respondents (48.7%) were dissatisfied with crime situation. There were always thefts and robbery happening in the residential area². In question number 4 regarding security control, 131 of the respondents (38.4%) were dissatisfied with current security enforcement. There was security team among the residents, but did not sustain since the residents had work commitments that needed to be attended to.

As for question number 5 and 6, 198 (58.1%) of the respondents were satisfied with the community relations. While 199 (58.4%) of the respondents were satisfied with the neighbourhood relations³. This is because PHP Kampung Limau is a resettlement from a squatter area. Previously, the respondents stayed with one big family consisting of mother, father, and siblings. When KLCH launched the PHP, KLCH offered one family per one house. For instance, the mother stayed at the fifth floor and the daughter stayed at the eighth floor. Moreover in question number 7, 166 (48.7%) of the respondents were satisfied with the traffic situation in the residential area while 108 (31.7%) of the respondents were dissatisfied with main route at the residential area. For example, during peak hours, the residents needed to face road congestion before they can reach their house. In question numbers 8, half of the respondents, 176 (51.6%), were satisfied with the social activities conducted in the neighbourhood. As for residential club which is in the last question, 139 (40.8%) of respondents were satisfied with the club management. For example, the residents organised various social functions such as open house, Independence Day celebration, marriage ceremony, and *gotong royong* activity.

Conclusion

Meeting housing requirements is an significant goal in the social and economic development goals of the country. Malaysian housing policies are created to provide appropriate housing for all levels of society and quality housing. However, to satisfy their housing requirements, the efficiency and effectiveness of housing provision requires thorough assessment of the determinants of housing satisfaction. It is important to note that distinct families have distinct perceptions of satisfying housing based on their distinctive needs and conditions.

In a nutshell, low-cost inhabitants of homes are satisfied with the current PHP systems. In the existing standard unit plan for low-cost housing, however, there are still weaknesses in the quality of low-cost housing standards and services. The residents' dissatisfaction with housing issues should be taken into consideration by the government. Community planning services must take into account population amount, place, type of equipment, and distance between low-cost accommodation and services. In the case of PHP Kampung Limau, Pantai Dalam, Kuala Lumpur, the planning of community facilities has to follow the appropriate planning guidelines and standards in order to make sure the residents enjoy and benefit from the available public facilities, flat features and social environment in the low-cost housing area.

¹ From the informal interview with the respondents, accidents rarely happened in the residential area but frequently happened at the main road.

² From the informal interview with respondents during the distribution of questionnaire, the crime situation always happened during working hours.

³ From the observation and informal interview with respondents, the residential area was occupied mostly by their relatives.

References

- Abdullah, A., Salleh, M. N. M., & Sakip, S. R. M. (2012). Fear of crime in gated and non-gated residential areas. *Procedia-Social and Behavioral Sciences*, 35, 63-69.
- Abidin, N. Z. (2009). Sustainable construction in Malaysia—developers' awareness. *World Academy of Science, Engineering and Technology*, 53, 807-814.
- Adebayo, C. O. (2013). *Comfort factors in low cost houses: Case study at Batu Pahat, Johor Malaysia* (Doctoral dissertation, Universiti Tun Hussein Onn Malaysia).
- Administrative Districts, M. (2017). Basic population characteristics. *Department of Statistics, Malaysia*.
- Asek, B. M. (2007). *The People's Housing Programme: A Study on the Implementation of Federal Government Housing in Peninsular Malaysia* (Doctoral dissertation, Jabatan Antropologi dan Sosiologi, Fakulti Sastera dan Sains Sosial, Universiti Malaya).
- Bajunid, A. F. I., & Ghazali, M. (2012). Affordable mosaic housing: rethinking low-cost housing. *Procedia Social and Behavioral Sciences*, 49, 245-256.
- Coakes, S. J., & Steed, L. (2010). *SPSS: Analysis without anguish using SPSS version 14.0 for Windows*. John Wiley & Sons, Inc..
- Coker, A. O., Awokola, O. S., Olomolaiye, P. O., & Booth, C. A. (2007). Challenges of urban housing quality and association with neighbourhood environments: Insights and experiences in Ibadan city, Nigeria. *Journal of Environmental Health*, 7(1).
- Construction Industry Development Board (CIDB) (1998). *National Housing Standard for High Rise Low Cost Housing-Construction Industry Standard (CIS-2)*. Kuala Lumpur: CIDB
- Construction Industry Development Board (CIDB) (2017). *National Housing Standard for High Rise Low Cost Housing-Construction Industry Standard (CIS-2)*. Kuala Lumpur: CIDB
- Economic Planning Unit. (2000). *Eight Malaysia Plan 2001-2005*. Putrajaya: The Economic Planning Unit, Prime Minister's Department.
- Economic Planning Unit. (2005). *Ninth Malaysia Plan 2006-2010*. Putrajaya: The Economic Planning Unit, Prime Minister's Department.
- Economic Planning Unit. (2010). *Tenth Malaysia Plan 2011-2015*. Putrajaya: The Economic Planning Unit, Prime Minister's Department.
- Economic Planning Unit. (2015). *Eleventh Malaysia Plan 2016-2020*. Putrajaya: The Economic Planning Unit, Prime Minister's Department.
- Evans, G. W., & Johnson, D. (2000). Stress and open-office noise. *Journal of applied psychology*, 85(5), 779.
- Field, A. (2009). *Discovering Statistics Using SPSS*. (3rd ed). Singapore: SAGE Publications Asia-Pacific PTE LTD.
- Galster, G. (1987). Identifying the correlates of dwelling satisfaction: An empirical critique. *Environment and Behavior*, 19(5), 539-568.
- Galster, G. C. (1985). Evaluating indicators for housing policy: Residential satisfaction vs marginal improvement priorities. *Social Indicators Research*, 16(4), 415-448.
- Galster, G. C., & Hesser, G. W. (1981). Residential satisfaction: Compositional and contextual correlates. *Environment and behavior*, 13(6), 735-758.
- Goh, A. T. and Ahmad, Y. (2012). Public low-cost housing in Malaysia: Case studies on low-cost flats in Kuala Lumpur. *Journal of Design and Built Environment*, Vol. 8, 1-18.
- Hafazah, A. K. (2008). The Quality of Life of Residents of Urban Low Cost Flats in Klang and Shah Alam, Selangor, Malaysia. *Philosophy Doctorate*, Universiti Kebangsaan Malaysia, Bangi.
- Hashim, A. E., Samikon, S. A., Nasir, N. M., & Ismail, N. (2012). Assessing factors influencing performance of Malaysian low-cost public housing in sustainable environment. *Procedia-Social and Behavioral Sciences*, 50, 920-927.
- Hashim, A. H. (2003). Residential satisfaction and social integration in public low cost housing in Malaysia. *Journal of Social Sciences & Humanities*, 11(1), 1-10.
- Hassanain, M. A., Sedky, A., Adamu, Z. A., & Saif, A. W. (2010). A framework for quality evaluation of university housing facilities. *Journal of Building Appraisal*, 5(3), 213-221.
- Hazman, S. (2010). *Data Analysis*. Faculty of Administrative Science and Policy Studies, UiTM Shah Alam, Selangor.
- Idrus, N. and Siong, H. C. (2008). *Affordable and quality housing through the low cost housing provision in Malaysia*. Paper presented at Seminar of Sustainable Development and Governance at Department of Civil Engineering, and Architecture, Toyohashi University of Technology.
- Ishak, N. H., Ariffin, A. R. M., Sulaiman, R., & Zailani, M. N. M. (2016). Rethinking space design standards toward quality affordable housing in Malaysia. In *MATEC Web of Conferences* (Vol. 66).

- Isnin, Z., Ramli, R., Hashim, A. E., & Ali, I. M. (2012). Sustainable issues in low cost housing alteration projects. *Procedia Social and Behavioral Sciences*, 36, 393-401.
- Jamaluddin, N. B., Abdullah, Y. A., & Hamdan, H. (2016). Encapsulating the delivery of affordable housing: An overview of Malaysian practice. In *MATEC Web of Conferences* (Vol. 66).
- Jiboye, A. (2004). The socio-cultural responsiveness of household size on housing quality in Osogbo, Nigeria. *Anthropologist*, 6(3), 169-174.
- Karim, H. A. (2012). Low Cost Housing Environment: Compromising Quality of Life?. *Procedia Social and Behavioral Sciences*, 35, 44-53.
- Kuala Lumpur City Hall. (2006). *Housing Management Division*. Kuala Lumpur City Hall.
- Kuala Lumpur City Hall. (2004). *Kuala Lumpur Structure Plan 2020: A World Class City*. Kuala Lumpur City Hall.
- Kuala Lumpur City Hall. (2017). *Kuala Lumpur Structure Plan 2020: A World Class City*. Kuala Lumpur City Hall.
- Latfi, M. F. M., Karim, H. A., & Zahari, S. S. (2012). Compromising the recreational activities of children in low cost flats. *Procedia-Social and Behavioral Sciences*, 50, 791-799.
- Leong, KC (2011). Public housing with community development under SAM enhances resident families, quality of life, *EAROPH 43rd Regional Seminar: An EAROPH-IFHP Joint Conference on Managing Urban Growth and Its Challenges*, Bandar Seri Begawam, Brunei, 8-10 November.
- Lu, M. (1999). Determinants of residential satisfaction: Ordered logit vs. regression models. *Growth and Change*, 30(2), 264-287.
- Maslow, A. H. (1962). *Towards a psychology of being*. Princeton: D. Van Nostrand Company.
- Masrom, M. (2007). Technology acceptance model and e-learning. *Technology*, 21(24), 81.
- Ministry Of Housing and Local Government. (2011). *National Housing Department*. Kuala Lumpur : Government Printer
- Ministry of Urban, Wellbeing, Housing and Local Government. (2013). *Program Perumahan Rakyat (PPR)*. Retrieve from <http://www.kpkt.gov.my/kpkt/>
- Ministry of Urban, Wellbeing, Housing and Local Government. (2017). *Housing for Urban Squatters Resettlement and the Low Income Group*.
- Ministry of Urban, Wellbeing, Housing and Local Government. (2017). *National Housing Policy*. Kuala Lumpur: Government Printer.
- Mohit, M. A., & Azim, M. (2012). Assessment of residential satisfaction with public housing in Hulhumale', Maldives. *Procedia-Social and Behavioral Sciences*, 50, 756-770.
- Mohit, M. A., & Nazyddah, N. (2009). Assessment of residential satisfaction with low-cost housing provided by Selangor Zakat Board in Malaysia. In *Proceedings of the 4th Australasian Housing Researchers Conference* (pp. 5-7).
- Mohit, M. A., Eusuf, M. S., & Ibrahim, M. (2014). Impact of outdoor environment to the quality of life. *Procedia-Social and Behavioral Sciences*, 153, 639-654.
- Mohit, M. A., Ibrahim, M., & Rashid, Y. R. (2010). Assessment of residential satisfaction in newly designed public low-cost housing in Kuala Lumpur, Malaysia. *Habitat international*, 34(1), 18-27.
- Morris, E. W., & Winter, M. (1976). A theory of family housing adjustment. *Journal of Marriage and the Family*, 37, 79-88.
- Morris, E. W., & Winter, M. (1978). A theory of family housing adjustment. *Journal of Marriage and the Family*, 79-88.
- Onibokun, A. G. (1974). Evaluating consumers' satisfaction with housing: An application of a systems approach. *Journal of the American Institute of Planners*, 40(3), 189-200.
- Onibokun, A. G. (1985). Public Housing Delivery System in Nigeria (1979-1983). *A Critical Review. Housing in Nigeria, Onibokun, AG (Ed.) Nigerian Institute of Social and Economic Research, NISER, Ibadan*, 429-446.
- Onibokun, A. G. (1985). *Housing in Nigeria: A book of Readings*. Nigerian Institute of Social and Economic Research.
- Salfarina, A. G., Nor Malina, M., & Azrina, H. (2010). Trends, problems and needs of urban housing in Malaysia *International Journal of Human and Social Sciences*, 248, 62.
- Salfarina, A. G., Nor Malina, M., & Azrina, H. (2010). Trends, problems and needs of urban housing in Malaysia. *International Journal of Human and Social Sciences*, 5(14), 977-981.
- Salleh, A. G. (2008). Neighbourhood factors in private low-cost housing in Malaysia. *Habitat International*, 32(4), 485-493.
- Salleh, A. G., & Yusof, N. (2006). Residential satisfaction in low-cost Housing in Malaysia. *Report of research funded by University Sains Malaysia USM*.
- Salleh, A. G., & Yusof, N. (2006). Residential satisfaction in low-cost Housing in Malaysia. *Report of Research Funded by University Sains Malaysia USM*.

- Salleh, A. G., Waziri, A. G., & Yusof, N. A. (2013). Residential Satisfaction with Private Housing Estate Development in Abuja-Nigeria. *ALAM CIPTA, International Journal of Sustainable Tropical Design Research and Practice*, 6(2), 3-12.
- Salleh, A.G. (2006). Residential satisfaction in private low-cost housing in Malaysia: A case study of Terengganu. *International Conference of Sustainable Housing 2006*, University Science Malaysia.
- Salleh, N. A., Yusof, N. A., Salleh, A. G., & Johari, N. (2011). Tenant satisfaction in public housing and its relationship with rent arrears: Majlis Bandaraya Ipoh, Perak, Malaysia. *International Journal of Trade, Economics and Finance*, 2(1), 10.
- Sebli, N., & Bujang, A. A. (2008). Role of Local Authority in Providing Quality Housing for Lower Income Group in Urban Area: A Case in the Kuala Lumpur City Hall in Shahabuddin Abdullah and Hasmah Abu Zarin. *Sustaining Housing Market*, 62-75.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shuid, S. (2004). Low medium cost housing in Malaysia: Issues and challenges. In *APNHR Conference*.
- Shuid, S. (2010). Low income housing allocation system in Malaysia: Managing housing need for the poor. International Housing Research Conference, Istanbul.
- Shuid, S. (2013). Case Studies in Public Housing I. Kuala Lumpur. *Policies, Issues and Prospects*, 225.
- Tabachnick, B.G. and Fidell, L.S. (2007). *Using Multivariate Statistics*. (5th ed). New York: Allyn and Bacon.
- Tan, S. H. (1980). Factors influencing the location, layout and scale of low-cost housing in Malaysia. *Public and private housing in Malaysia. Kuala Lumpur: Heinemann Educational Books (Asia) Ltd.*
- United Nations Centre for Human Settlements (2006). *Enabling shelter strategies: review of experience from two decades of implementation*. Nairobi.
- United Nations Centre for Human Settlements. (1996). *An urbanizing world: global report on human settlements, 1996*. Oxford University Press, USA.
- United Nations Human Settlements Programme & the Office of the United Nations High Commissioner for Human Rights (2010). *Report expert group meeting on housing rights monitoring*. Geneva.
- Yahya, N., & Hashim, A. H. (2001). Perumahan dan Kediaman. *Malaysia: Universiti Putra Malaysia*.
- Zaid, N. S. M., & Graham, P. (2011). Low-cost housing in Malaysia: A contribution to sustainable development?. *Procedia Energy, Environment and Sustainability*, 82-87.
- Zain, Z. M. (2012). Housing Issues: A Study of Hulu Selangor District Council. *Procedia-Social and Behavioral Sciences*, 42, 320-328.
- Zainal, N. R., Kaur, G., Ahmad, N. A., & Khalili, J. M. (2012). Housing conditions and quality of life of the urban poor in Malaysia. *Procedia-Social and Behavioral Sciences*, 50, 827-838.