

**6th UNDERGRADUATE SEMINAR ON BUILT ENVIRONMENT** AND TECHNOLOGY (USBET) 2023

> SUSTAINABLE BUILT **ENVIRONMENT**

25 - 27 SEPTEMBER 2023







6th UNDERGRADUATE SEMINAR ON BUILT ENVIRONMENT AND TECHNOLOGY (USBET) 2023

SUSTAINABLE BUILT ENVIRONMENT

# Published by,

Department Of Built Environment Studies And Technology Faculty Of Architecture, Planning & Surveying Universiti Teknologi MARA Perak Branch, Seri Iskandar Campus usbet.fspuperak@gmail.com

## Copyright @ 2023

Department Of Built Environment Studies And Technology Faculty Of Architecture, Planning & Surveying Universiti Teknologi MARA Perak Branch, Seri Iskandar Campus

This work is subject to copyright. All rights are reserved by the Publisher. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording or any information storage and retrieval system without permission in writing from the copyright owners.



02 October 2023 | Perak, Malaysia
Universiti Teknologi MARA, Perak Branch, Seri Iskandar Campus

## **EDITORIAL BOARD**

#### **Editors-in-Chief**

SR. NORAZURA MIZAL AZZMI (BS) NADIRA AHZAHAR (BS)

#### **Editors**

TS. ZURAIHANA AHMAD ZAWAWI (BS)

SR. NAZHATULZALKIS JAMALUDIN (BS)

SR. SITI ZUBAIDAH HASHIM (BS)

NURHIDAYAH SAMSUL RIZAL (BS)

SR DR. NURUL FADZILA ZAHARI (BS)

NUR FADHILAH BAHARDIN (BS)

SR TS. DR. ALIA ABDULLAH SALLEH (BS)

SR TS. DR. SURIANI NGAH WAHAB (BS)

SR TS. DR. HASNAN HASHIM (BS)

SR NOORAZLINA KAMARUZZAMAN (BS)

SR MARIATY MOHD BAHARI (BS)

SR AIDA AFFINA ABDUL GHANI (BS)

DR. NOR DIANA AZIZ (BS)

SR AMIR FASHA MAT ISA (BS)

SR DR. NOR AMIN MOHD RADZUAN (BS)

PROF. MADYA SR DR. MOHD FADZIL YASSIN (BS)

SR TS. KHAIRUL AMRI RAMLY (BS)

SR. MOHD ASRUL HASIN (BS)

SR TS. MOHD KHAZLI ASWAD KHALID (BS)

SR MOHD DZULKARNAEN SUDIRMAN (BS)

SR DR. IRWAN MOHAMAD ALI (BS)

SR DR. MOHAMMAD HASZIRUL MOHD HASHIM (BS)

DR NURHASYIMAH BT AHMAD ZAMRI (BCT)

DR. PUTERI YULIANA SAMSUDIN (TP)

# Editors-in-Chief

6th Undergraduate Seminar on Built Environment and Technology 2023

# - E- Proceedings-

Organized by,

 $College\ of\ Built\ Environment\ (KAB)\ UiTM\ Perak\ Branch$ 



# RESIDENT'S SATISFACTION ON HOUSING QUALITY FOR LOW-COST STRATA PROPERTY IN KLANG

Maizatul Syafiqah Syuhada Mohammad<sup>1</sup>, Nurulanis Ahmad @ Mohamed<sup>1\*</sup>

<sup>1</sup>Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA, Perak Branch, 32610, Seri Iskandar, Perak, Malaysia

2021620478@student.uitm.edu.my, \*nurul513@uitm.edu.my

#### gotta dont. altin. oda.my, maraio ro agaitm. oda.my

#### **ABSTRACT**

Housing is critical for meeting people's basic needs; it offers shelter, and individuals spend most of their daily activities in the neighbourhoods. Low-cost high-rise residential housing for low-income families is still a serious challenge worldwide, particularly in Malaysia. The elements of housing quality consist of maintenance, vandalism, design and quality, social and mental health, safety and environment, and community and neighbour's engagement. Quality housing indicates great quality of life. However, the crucial issues arise as a variety of direct repercussions of poor housing quality have been documented, including but not limited to: injuries sustained in the home, deaths resulting from house fires, symptoms of respiratory illness, cardiac events, and mental health issues. Therefore, the researcher intended to identify the elements of housing quality for low-cost strata property and to rank the most satisfied elements on housing quality for low-cost strata property. The study was conducted among 333 residents of ABC Flat in Klang using quantitative method. Fortunately, all the questionnaires were successfully answered. The questionnaire was distributed to respondents through Google Forms using purposive sampling. The data gathered was analysed using Social Statistics for Package Science (SPSS) version 27. The findings demonstrate that the majority of the respondents are satisfied with the aspects of design and quality of the ABC Flat. Moreover, the findings show that only a few of them are satisfied with the aspect of vandalism. Hence, this study recommends that future researcher to include other types of properties, such as medium-cost strata properties or even landed properties.

Keywords: Strata property, quality housing, Klang, issues, elements

© 2023 USBET, JABT, UiTM Perak Branch, All rights reserved

### INTRODUCTION

Housing provides refuge and is where most people spend their days (Yap, Yong, & Skitmore, 2019). The government implemented strata housing due to land constraints, they are building low-cost strata housing to meet the national housing policy's goal of providing shelter and facilities to all Malaysians with low-cost income. High-rise residential demand has increased annually, shifting residential building patterns from vertical to horizontal. The occupants of strata buildings mean they must share amenities (Rabe et al., 2021). Low-cost strata housing examples include *Skim Perumahan Rakyat Malaysia* (PR1MA), *Projek Perumahan Rakyat* (PPR), and *Projek Rumah Selangorku* (MYPT3, 2023). Housing quality is meeting customer expectations and providing high-quality dwellings. Experts, bureaucrats, and other decision-makers establish, interpret, and implement housing quality standards to suit these needs (Ali, Abdul Rahman & Ghani, (2018).

#### PROBLEM STATEMENT

The government's initiative to provide low-cost housing for individuals is commendable, but home quality in low-cost strata units remains a worry. Rising pricing and poor building techniques are causing a low-cost housing crisis. Malaysia's low-cost housing doesn't meet families' social, cultural, and religious needs. The Kuala Lumpur Structure Plan 2020 also noted low space standards, insufficient community services, excessive maintenance expenses, and poor construction and materials in low-cost housing complexes. These are just some of the problems that have been identified in relation to low-cost housing (Wahi et al., 2018).

Living standards and lifestyles have improved dwelling quality. The Malaysian National Home Policy emphasizes quality in new home development, recognizing its relevance. The Malaysian National Housing Policy (NHP) aims to improve people's lives by providing appropriate, pleasant, high-quality, and affordable housing (Ali, Abdul Rahman, & Ghani, 2018). Housing markets now prioritize tenant satisfaction (Rabe et al., 2021). Modern housing patterns influence occupants' requirements, choices, and satisfaction. Housing upgrading drives these requirements and alternatives (Rabe et al., 2021).

Most Malaysian low-cost strata lack recreational facilities like multifunction halls and playgrounds for community and recreational events. Thus, local governments and citizens must work together to provide environmental components and services, make towns liveable, and improve urban life (Wahi et al., 2018). *Program Perumahan Rakyat Kampung Limau* people were less satisfied with their living conditions than *Perumahan Awam Putra Ria* residents, according to research. The bedroom size and layout, toilet and dry yard layout, window material, and sound insulation were all issues for the residents. Anuar & Ramele, (2017).

Low-cost strata properties have too few lifts, and most are broken. Disabled facilities follow (Wahi et al., 2018). Disabled people cannot use some facilities because they are not accessible. The Town and Country Planning Department's "Planning Guidelines and Standards – Facilities of the Disabled" details their unique demands (Ta, P. T., n.d.). The public facilities in low-cost strata housing dissatisfy inhabitants, according to the earlier study. Thus, public amenities' preparation and management affect citizens' psychological health. This ensures residents' well-being and comfort. Ismail (Azili & Taufik, 2019).

Housing quality is a crucial indicator of health, safety, and sustainability. Without precise comparative measures, building quality improvement cannot be tracked. Better housing can minimize climate change, save lives, prevent illness, improve quality of life, and reduce poverty. Urbanization, aging populations, and climate change make housing more important to health (Au-Yong, 2011).

#### Research Aim

To investigate the point of view of the residents regarding the housing quality of low-cost strata properties.

#### **Research Questions**

What are the elements of housing quality for low-cost strata property and what is the rank of the elements on housing quality for low-cost strata property.

# **Research Objectives**

To identify the elements of housing quality for low-cost strata property and to rank the most satisfied elements on housing quality for low-cost strata property.

# Scope of Study

The rank of satisfaction that residents have with the housing quality offered by low-cost strata property will be the primary focus of the investigation's scope. ABC Flat is chosen as the case study as it is located in Klang. Klang is chosen as the area of study as it is known to be one of the oldest cities in Malaysia. Moreover, ABC Flat has been built for a quite long time. Consequently, the objective of this study is to rank the most satisfied elements on housing quality for low-cost strata property. The population in ABC Flat is approximately around 2,000 people. With a population size of 2000 people, based on Solvin's Formula for sample size calculations, the total minimum sample size of this study is 333 people.

#### LITERATURE REVIEW

The literature review covers the pertinent definitions and elements that concern low-cost strata properties. All of the issues exist, which greatly reduces residents' contentment with low-cost strata houses. The reviews of studies that other researchers have undertaken in a similar manner are presented next.

#### **Definition of Terms**

# **Low-Cost Strata Properties**

Government-subsidized multi-owner strata properties are low-income housing plans. In a low-cost stratum construction, residents share stairs, corridors, roofs, walls, and other amenities. It was built on a vertical plot of ground with various residential units (Ariff & Davies, 2011). According to Ishak et al. (2016), since 1981, the Ministry of Housing and Local Government has defined low-cost multi-owner housing as flat, targeting households with a monthly income of less than RM750, with a minimum design standard of 550-600 square feet, two bedrooms, a living room, a kitchen, and a bathroom.

# Resident's Perspective

A resident is someone who lives there or has a place to call home, whereas a perspective is how someone feels or perceives something (Cambridge Dictionary). A resident's perspective can be characterized as a resident's opinion or feeling about something when combined. A resident may be a landlord or a homeowner. Residents are those who reside in low-cost strata properties for the purposes of this study.

#### Satisfaction

Sousa and Lyubomirsky, (2001) define satisfaction as enough to make or do in Latin. Latin "satis" means "enough." Satisfaction is multifaceted. Sociology, economics, law, psychology, urban and regional planning, marketing, music, and entertainment use it frequently. According to satisfaction literature, satisfaction is dependent on expectations, attitudes, and beliefs, making it subjective and value-laden (Sirgy, 2012).

# **Housing Quality**

The British Standards Institute (BSI) defines quality as "all those features of a product (or service) which are demanded by the customers". The International Organization for Standardization lists "customer attention" as the first principle of company quality management (Ali, Abdul Rahman, & Ghani, 2018). Due to differing perspectives, Law (1995) states that housing quality is a difficult topic that can be debated. Additionally, location, privacy, security, and neighbourhood impressions affect a housing's quality. Law (1995) supported this idea, arguing that housing quality must consider the reciprocal relationships between residential building attributes and the wider environmental situation.

# Quality of Life (QoI)

The subjective measure of happiness known as "quality of life" is a crucial factor in many financial decisions. Depending on personal preferences, many factors affect

people's quality of life differently, but they frequently include things like financial stability, job satisfaction, family life, health, and safety (Kagan, 2022). The idea of the quality-of-life clashes with monopolies' excessive earnings and their heedless pursuit of profit. Quality of life is included in sustainable development, which refers to strategies aimed at ensuring growth in a way that both meets people's needs today and does not degrade them in the future (Ruževičius, 2007).

# **Elements of Housing Quality**

Author(s)	Harrison	Wimalasena et al.	Evans & Kantrowitz	Goodchild	Rahman et al.	Chiu	Ali, Abdul Rahman & Ghani	Frequency
Year of Publication	n.d.	2022	2002	1997	2015	2003	2018	
Element								
Social and Mental Health			<b>V</b>	V				2
Design and Quality	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	7
Community and Neighbour's Engagement		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		4
Maintenance		$\sqrt{}$	$\sqrt{}$				$\sqrt{}$	3
Vandalism				$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	4
Safety and Environment			$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	5

#### **METHODOLOGY**

This study adopted a quantitative method. An online questionnaire was used in order to achieve the objective. The survey was conducted in a low-cost strata property in Klang which is ABC Flat, and the respondents were the residents of the flat. The data obtained from the questionnaire survey were analyzed for the research evaluation to rank the most satisfied elements on housing quality for low-cost strata property. Purposive sampling, a non-probability sampling technique, was used in this study to choose questionnaire respondents. The questionnaire consists of two sections which are Section A for the demographic profile and Section B for the resident's satisfaction on housing quality for low-cost strata property. 333 set of questionnaires were distributed to the flat and 333 sets of questionnaires were fulfilled and returned to the researcher. These questionnaires were distributed to the residents in ABC Flat in Klang that fit the characteristics. The collected data was analysed using SPSS Version 27.

#### ANALYSIS AND FINDINGS

The data gathered is all analysed using different variables. Demographic profile and resident's satisfaction are the variables. Using SPSS version 27, the gathered data was then analysed. The results of the analysis were presented as tables, frequency counts, and mean values in order to make them easy to understand and demonstrate the conclusions. The frequency analysis is one of the descriptive statistical techniques that was used to illustrate the frequency of each response selected by the respondents. Following that, the findings were tallied in terms of frequency numbers and percentages of all respondents.

# Resident's Satisfaction on Housing Quality for Low-Cost Strata Property

Table 1: Descriptive Statistic for the Mean Values of Selected Variables

Variable	Mean	Rank
Design and Quality	3.1131	1
Social and Mental Health	3.0511	2
Community and	3.0413	3
Neighbour's Engagement		
Safety and Environment	2.9199	4
Maintenance	2.8776	5
Vandalism	2.7307	6

Table 1 shows the ranking of mean scores on the resident's satisfaction on housing quality for low-cost strata property. It was determined by the mean score for each element based on the survey done on the online questionnaire that has been analysed by SPSS version 27. As a result, based on Table 1, the highest mean is the design and quality with 3.1121 mean value. Next, it is followed by social and mental health with 3.0511 mean value. The third rank is community and neighbourhood's engagement, followed by safety and environment. The fifth rank is maintenance, and the least is vandalism. According to the interpretation of the mean, all the elements ranked are at a medium level

#### CONCLUSION AND RECOMMENDATIONS

The aim of this research is to investigate the point of view of the residents regarding the housing quality of low-cost strata property. Many information on the elements of housing quality for low-cost strata properties that have been gathered. In determining the housing quality, the main important elements are maintenance, vandalism, social and mental health, safety and the environment, community and neighbour's engagement, and design and quality are the six issues that have been found as a consequence of this research. As a consequence of this, the aims of the research were accomplished in a laudable and flawless manner.

Since this research only covers low-cost strata properties, it is recommended that the future researcher expand the scope of research to include other types of properties, such as medium-cost strata properties or even landed properties. Additionally, the location of the research can be moved about if necessary. Furthermore, the future researcher can take into consideration extending the research in regard to the strategic ways to mitigate the aspects of housing quality. This could be done so that different findings can be obtained due to the fact that the attributes are diverse.

#### ACKNOWLEDGEMENT

The authors want to thank you Universiti Teknologi MARA, Perak Branch for the financial contribution. The authors also want to thank you reviewers for their helpful comments and suggestions.

#### REFERENCES

- Ali, M., Abdul Rahman, N., & Ghani, I. (2018). *Interpreting the Meaning of Housing Quality Towards Creating Better Residential Environment*. 8th Asia-Pacific International Conference on Environment-Behavior Studies.
- Anuar, M. F., & Ramele, R. (2017). Occupants' Satisfaction on Internal Layout of Low-Cost High Rise Housing in Kuala Lumpur. Built Environment Journal, 10-16.
- Ariff, N.R., & Davies, H. (2011). *Multi-owner low-cost housing management in Malaysia: Effects of owner-occupant characteristics and occupancy rates*. International Journal of Housing Markets and Analysis, 4, 268-289.
- Au-Yong, Cheong Peng; Azmi, Nur Farhana; Mahassan, Nur Aaina . (2011). Journal of Facilities Management, 397-410.
- Chiu, R. L. H. (2003). Sustainable Development, Social Sustainability and Housing Development: the Experience of Hong Kong. In: R.Forrest and J. Lee (eds). Housing and Social Change: East-West Perspectives. London, Routledge, 221-239.
- Evans, G. & Kantrowitz, E., 2002. Socioeconomic Status and Health: the Potential Role of Environmental Risk Exposure. *Annual Review of Public Health,* Volume 23, pp. 303-331.

- Goodchild, B. (1997). Housing and the Urban Environment: A Guide to Housing Design, Renewal and Urban Planning. *Blackwell, Oxford.*
- Harrison, A. (n.d.). Housing Quality Indicators.
- Ismail, A.S., & Azili, N.S. (2019). The Effectiveness Of Public Facilities In Low Cost Housing Flats From Residential Satisfaction Towards Sustainable Living.
- Ishak, N. H., Mohd Ariffin , A. R., Sulaiman, R., & Mohd Zailani, M. N. (2016). Rethinking Space Design Standard Towards Quality Affordable Housing in Malaysia. MATEC Web of Conferences.
- Kagan, J. (2022, June 24). What Is Quality of Life? Why It's Important and How to Improve It. Retrieved from Investopedia: https://www.investopedia.com/terms/q/quality-of-life.asp
- Law, R. J. (1995). Housing Quality: An Agenda for Research. 1655-1664.
- MYPT3. (2023, February). Rumah Mampu Milik 2023: Permohonan Murah Perumahan Kerajaan. Retrieved from MYPT3: https://mypt3.com/rumah-mampu-milik-malaysia
- Rabe, N. S., Abdullah, M. F., Ponrahono, Z., & Fitri Abdul Aziz, I. (2021). *Issues Faced by Tenants In High-Rise Strata Residential: Case Study Of Klang Valley*. Journal of the Malaysian Institute of Planners, 180 191.
- Rahman, N. A., Shamsuddin, S. & Ghani, I. (2015). What makes people use the street? Towards a liveable urban environment in Kuala Lumpur city centre. Procedia- Social and Behavioral Sciences, 170 624-632.
- Ruževičius, J. (2007). Quality of Life and of Working Life: *Conceptions and Research*.
- Sirgy, M. J. (2012). The Psychology of Quality of Life: Consequences of Hedonic Well-Being, Life Satisfaction and Eudaimonia. Second Edition. doi:10.1007/978-94-007-4405-9 3
- Sousa, L., & Lyubomirsky, S. (2001). Life Satisfaction. Encylopedia of women and gender: Sex similarities and differences and the impact of society on gender, 2, 667-676.

- Ta, P. T. (n.d.). Managing High-Rise Residential Building in Malaysia: Where Are We? 2nd Naprec Conference, *INSPEN*, 1-25.
- Wahi, N., Zin, R. M., Munikanan, V., & Junaini, S. (2018). *Problems and Issue High-Rise Low-Cost Housing in Malaysia*. IOP Conference Series: Material Science and engineering.
- Wimalasena, N. N., Chang-Richards, A., Wang, K. I., & Wang, K. I. (2022). Housing Quality Indicators: A Systematic Review. *World Construction Symposium*, 531-544.
- Yap, J. B., Yong, P. S., & Skitmore, M. (2019). Analysing the desired quality of housing in the Klang Valley region, Malaysia. *Pacific Rim Property Research Journal*, 125-140.

Universiti Teknologi MARA Cawangan Perak Kampus Seri Iskandar 32610 Bandar Baru Seri Iskandar, Perak Darul Ridzuan, MALAYSIA Tel: (+605) 374 2093/2453 Faks: (+605) 374 2299



Prof. Madya Dr. Nur Hisham Ibrahim Rektor Universiti Teknologi MARA Cawangan Perak

Tuan,

# PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UITM CAWANGAN PERAK MELALUI REPOSITORI INSTITUSI UITM (IR)

Perkara di atas adalah dirujuk.

- 2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (digitize) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.
- 3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

"BERKHIDMAT UNTUK NEGARA"

seryu.

Saya yang menjalankan amanah,

21.1.2023

PROF. MADYA DR. NUR HISHAM IBRAHIM REKTOR UNIVERSITI TEKNOLOGI MARA CAWANGAN PERAK KAMPUS SERI ISKANDAR

SITI BASRIYAH SHAIK BAHARUDIN Timbalan Ketua Pustakawan

nar