

USBET 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,

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



PERCEPTION ON PHYSICAL DILAPIDATION BUILDING TOWARD THE SAFETY OF RESIDENTS AND NEARBY COMMUNITY: CASE STUDY WALLER COURT, IPOH, PERAK

Wan Ezmira Farhanah Khairul Fuad¹, Muhamad Hilmi Mohamad @ Masri^{1*}

¹Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi MARA, Perak Branch, Seri Iskandar Campus, 32610, Seri Iskandar, Perak Malaysia

ezmirafarhanahh@gmail.com, *muhamadhilmi@uitm.edu.my

ABSTRACT

The government has suggested and executed affordable housing initiatives since independence. A house that is affordable is one that can provide the fundamental needs of a citizen. However, low-cost housing is frequently plagued by maintenance issues and ineffective management. Building neglect and dilapidated is a severe issue that must be addressed, as it is a long-term issue that affects both the government and the community. Dilapidated buildings that are no longer maintained by the responsible parties have the potential to endanger the safety of residents and those around them. The aim of this research is to identify the perception on physical dilapidation building toward the safety of residents and nearby community in Waller Court. Quantitative approach is used and the findings are the residents' safety has been compromised due to the building's physical dilapidation, although this differs from the nearby community, which is less affected in terms of safety. For future studies, it is suggested that researchers explore the way dilapidated affects issues other than safety and the researcher might utilise this study as a point of reference in the future in performing more in-depth research on the dilapidated of different building types, such as shophouses, pre-war structures, and so on.

Keywords: Real Estate, Dilapidated Building, Safety

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

INTRODUCTION

Housing is extremely vital not only in Malaysia, but throughout the world (Zaid & Graham, 2011). A house's purpose is to protect and shelter those who live in it (Wahi et al., 2018). For the stability of the population's welfare and the health of the national economy at the time, the government advocated offering inexpensive homes to its citizens. The government has suggested and executed affordable housing initiatives since independence. A house that is affordable is one that can provide the fundamental needs of a citizen. Also, low-cost housing was introduced and proposed in the First Malaysia Plan (1966–1970) (Rehda, 2018), which aimed to improve the quality of life for low-income groups and use affordable housing as a solution to the problem of slums in urban areas. The creation of affordable housing must adhere to minimal standard requirements to assure the quality of the homes (Syahidah et al., 2018). According to the study's title, Waller Court apartment is also part of the local authority of Ipoh, Perak's affordable housing initiative.

LITERATURE REVIEW

Low-Cost Flat

Affordable housing is one of the government and private's programmes to assist low-income persons in owning a decent home and to address the problem of homeless people and squatters in urban areas (Hashim et al., 2015). Flats are also among the low-income housing options supplied by the government. As noted above, the government has suggested and executed affordable housing initiatives since independence. A house that is affordable is one that can provide the fundamental needs of a citizen. Federal government agencies, state governments, and the corporate sector will implement this strategy for the benefit of the M40 and B40 demographic groups (Abd Halim et al., 2019). However, due to vandalism and maintenance fees arrears, flats frequently encounter maintenance issues. Improving the efficiency of public housing allocation and residential satisfaction is critical to achieving the social inclusion goals (Huang & Du, 2015). The management body must regularly analyse maintenance work in order to improve the quality of building inhabitants in terms of safety, health and comfort.

Dilapidated Building

The maintenance aspect is one of the most crucial components that is frequently overlooked and deemed unnecessary during the design phase of a building. The comfort of building occupants can be ensured through quality design and upkeep (Saranya & Mewa, 2017). Dilapidation is the term for a building's damage, decay, or general state. Dilapidation can happen for a variety of reasons, including natural ageing and decay, lack of maintenance operations or no maintenance, inappropriate

use of structures, improper materials selection, shoddy construction, the impact of a hostile environment, natural disasters, and others (Saranya & Mewa, 2017). Apart from maintenance, poor installation of building services equipment is another factor that contributes to dilapidated building. Cracks, defective rainwater goods, rotting flooring, insect or termite attack on timber elements, roof defects and dampness penetration are all examples of bad building services equipment installation (Kayan, n.d.). The following point concerns safety. According to the Faur & Maria, (2019), dilapidated building not only endanger the residents but also to others who live nearby. Cracking of fragments of bricks, plaster and tiles that fall from the structure and injure persons nearby is one of the dangers that might occur as a result of a dilapidated building. Furthermore, the individual's emotional well-being also is affected by his or her location of residence and its condition. A decrepit structure may trigger feelings of annoyance, worry, stress, and anxiety (Sullivan & Chang, 2011).

Safety and Crime Rate

According to brooks, (2010), it suggests that security can be referred to a predictable atmosphere where groups of individuals can interact without fear of being hurt or alarmed and feels secured. security is the component that is directly tied to the crime rate that occurs in a specific location (attia, 2021). crime is defined as any act that violates the law, and offences such as murder, robbery, rape, kidnapping, and so on can result in jail or a fine depending on the circumstances. various aspects can be considered when determining the reasons of crime in a specific location, including social causes, economic causes, psychological causes, biological causes, and geographical causes. the crime rate is closely tied to the rising expense of living year after year. the problem of rising living costs affects not only malaysia, but also large countries such as the united states and japan on a worldwide scale. a huge country like the united states is experiencing a purchasing power gap because some cities in the country sell things at exorbitant prices (mohd aqmin abdul wahab, hazrul izuan shahiri, mustazar mansur & mohd azlan shah zaidi, 2018).

RESEARCH METHODOLOGY

In this study, quantitative approach is utilized to examine the perception on physical dilapidation building toward the safety of residents and nearby community in Waller Court. It is also a strategy for identifying elements in dilapidated buildings that have an impact on the perspective of residents and the nearby community. Two sets of questionnaires were sent to different categories of respondents: residents and nearby community. The primary data acquired then was analysed using SPSS software by applying descriptive analysis. Aside from the primary data, secondary data is also used to collect information about dilapidated building elements. Secondary data are gathered from Publish & Perish, Scopus, and Google Scholar. This research also

employs Waller Court flat as a case study. Waller Court Flat is a low-income housing project located in Ipoh, Perak. It consists of 17 blocks with 500 housing units and 36 shop units.

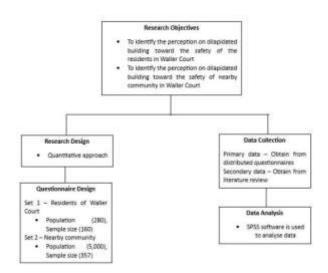


Figure 1: Research Design Process



Figure 2: External condition of Waller Court

ANALYSIS AND DISCUSSION

The primary objective is to identify the perception on physical dilapidation building toward the safety of residents in Waller Court. Based on this objective, data from 70 sample respondents was collected, and it can be determined that the majority of respondents' safety affected by the physical dilapidation of building in which they live, and the second objective is to identify the perception on physical dilapidation building toward safety of nearby community in Waller Court. Based on this objective, data from 150 sample respondents was collected. For objective 1, it can be inferred that safety has a significant effect for the residents of Waller Court. Because the dilapidated condition of Waller Court attracts the attention of crimes, it has sadly resulted in a threat to the safety of the residents. Meanwhile, it is possible to conclude that the maintenance management element has the greatest impact on the communities nearby. A big proportion of nearby communities felt that Waller Court's unsafe state could collapse at any time, causing catastrophic damage to the residents and nearby structures. In addition, some citizens believe that this Waller Court flat poses a threat of terror to the general populace in addition to being an issue with the building's age and lack of maintenance. Below is the comparison table of perception on dilapidated building toward the safety of residents and nearby community in Waller Court.

Table 1: Comparison table of perception on dilapidated building toward the safety of residents and nearby community

Residents	Elements of Dilapidated Building	Nearby Community
3	Emotional well-being	3
1	Safety	4
2	Building services equipment	2
4	Maintenance management	1

The comparison table above indicates that objectives 1 and 2 have been met with success. As a result of the findings, the residents' safety has been compromised due to the building's dilapidation, although this differs from the nearby community, which is less affected in terms of safety. Residents' safety can be compromised not just by criminal activity, but also by building services equipment, as seen in the table above. An analysis of the parts of the building that were frequently damaged was undertaken. The table below ranks the most often damaged building components.

Table 2: Ranking table of frequently damaged building parts

Parts of Building	Rank
Blocked drain	7
Leaking roof	5
Sewage system problem	2
Rotten wooden structure	1
Broken window	3
Pipe leakage	6
Obsolete wiring system	4
Others	8

The rotting wooden structure problem there is classified as severe enough to cause the building to collapse in the long run. The rotting wooden structure problem affects not only a portion of the building but every block and unit in the flat. A brief engagement with one of the respondents revealed that roof fragments frequently fall as a result of the rotting wood framework. She also expressed concern of the safety of herself and other residents if no safety measures were put in place by the accountable party.

CONCLUSION

Given that of the Waller Court flat's age and condition, numerous issues develop that regularly bother the residents and nearby community. Building structures that are too old and no longer function correctly are a common source of damage. Furthermore, according to the literature review, the residents and nearby community are afraid due to criminal acts and building condition that have occurred. The findings of the literature review also revealed that there are features of dilapidated buildings that affect residents and the nearby community, notably emotional well-being, safety, building services equipment, and maintenance management. All of the elements stated have a minor or maximal impact on residents and nearby community. The first study's objective is to identify the perception on dilapidated building toward the safety of residents in Waller Court, therefore, it can be concluded that the majority of Waller Court residents are substantially affected in terms of safety. As well as the second objective, which is to identify the perception on dilapidated building toward the safety of nearby community, and they are in agreement with the residents of Waller Court but in terms of maintenance management. The dilapidation of the Waller Court residential building has a significant impact on the residents there and the

surrounding neighbourhood, yet the management can do little but continue performing maintenance work if complaints are made.

RECOMMENDATIONS FOR FUTURE RESEARCH

This study is only concerned with the residents and neighbourhood communities of lpoh's Waller Court flats. As a result, the researcher might utilise this study as a point of reference in the future in performing more in-depth research on the physical dilapidation of different building types, such as shophouses, pre-war structures, and so on. The sample size employed in this study is likewise limited, but it can be made better by expanding the number of respondents so that the results can be more broadly analysed on how the respondents get affected by the physical dilapidation. In the future, it is also suggested that researchers explore the way dilapidated affects issues other than safety. For instance, comfort, environmental and health-related factors, and so forth.

REFERENCES

- Abd Halim, N., Samsudin, S., NurFarzana, A., & Hadenan, F. H. (2019). *Dasar Perumahan Mampu Milik Negara*.
- Abdul Wahab, M. A., Mansur, M., Shahiri, H., & Zaidi, M. A. S. (2018). *The Rising Cost of Living in Malaysia: A Slow Income Growth or Increasing Standard of Living.* Jurnal Ekonomi Malaysia.
- Attia, M. (2021a). Enhancing Security in Affordable Housing: The Case of Prince Fawaz Project. Journal of Contemporary Urban Affairs, 5.
- Attia, M. (2021b). Enhancing Security in Affordable Housing: The Case of Prince Fawaz Project. *Contemporary Urban Affairs*.
- Brooks, D. J. (2010). What is Security: Definition Through Knowledge Categorization.
- Faur, F., & Maria, A. N. I. (2019). The Impact and The Risk of Abandoned Buildings from Petrosani City on the Urban Environment.
- Goh, Tee, A., & Yahaya, A. (2011). Public Low-Cost Housing in Malaysia: Case Studies on PPR Low-Cost Flats in Kuala Lumpur.
- Hashim, A. E., Samikon, S. A., Ismail, F., & Ismail, Z. (2015). *Managing Facilities on Malaysian Low-Cost Public Residential for Sustainable Adaptation*.

- Huang, Z., & Du, X. (2015). Assessment and Determinants of Residential Satisfaction with Public Housing in Hangzhou, China.
- https://www.sciencedirect.com/science/article/abs/pii/S0197397515000260
- Kayan, B. (n.d.). Building Maintenance in Old Buildings Conservation Approach: An Overview of Related Problems. Journal of Design and the Built Environment.
- Mohd Aqmin Abdul Wahab, Hazrul Izuan Shahiri, Mustazar Mansur, & Mohd Azlan Shah Zaidi. (2018). Kos Sara Hidup Tinggi di Malaysia: Pertumbuhan Pendapatan Isi Rumah yang Perlahan atau Taraf Hidup yang Meningkat.
- Rehda. (2018). Social Housing in Malaysia.
- Saranya, T., & Mewa, A. (2017). A Study on the Level of Dilapidation in Existing Apartment Buildings in Urban Areas and Proposing Suitable Remedial Measures. *Civil Engineering and Technology*.
- Sullivan, W. C., & Chang, C.-Y. (2011). Mental Health and the Built Environment.
- Syahidah, W. S., Ridzuan, M. R., & Syazwani, N. A. (2018). *Demystifying The Low Cost Housing Issues In Malaysia*.
- Thotakura, S. (2011). Crime: A Conceptual Understanding.
- Wahi, N., Mohamad Zin, R., Munikanan, V., Mohamad, I., & Junaini, S. (2018). Problems and Issues of High Rise Low Cost Housing in Malaysia. *IOP Conference Series: Materials Science and Engineering*, 341, 012027. https://doi.org/10.1088/1757-899X/341/1/012027
- Zaid, S., & Graham, P. (2011). Low-Cost Housing in Malaysia: A Contribution to Sustainable Development.

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"

Saya yang menjalankan amanah,

Setuju.

27.1-2023

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

SITI BASRIYAH SHAIK BAHARUDIN Timbalah Ketua Pustakawan

nar