

The Effects of People's Housing Programme (PHP) and Crime Prevention through Environmental Design (CPTED) on the Residential Environment on Quality of Life in Malaysia

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Abstract

This study investigates the impact of the People's Housing Programme (PHP) residential environment on Crime Prevention Through Environmental Design (CPTED) and overall Quality of Life (QOL) in Malaysia. The primary objective is to assess how PHP influences residents' well-being through CPTED measures. A quantitative approach was employed, using survey data from 450 respondents in PHP areas across Kuala Lumpur, Johor, and Penang. Data were analyzed with SPSS and Smart PLS to explore the relationships between the PHP environment, CPTED, and QOL. The study found a positive relationship between PHP residential environments and both CPTED and QOL. PHP has effectively provided affordable housing that enhances residents' security and overall well-being. However, challenges such as physical and mental health issues, perceived safety concerns, and weak social relationships were identified. To enhance the quality of life for residents in PHP areas, it is recommended to strengthen CPTED strategies to improve safety and security, thereby reducing crime rates and enhancing residents' sense of well-being. Additionally, promoting community engagement through organized programs and activities can foster stronger social ties and a sense of belonging among residents. Upgrading and maintaining residential infrastructure, particularly in terms of cleanliness, waste management, and recreational facilities, is crucial for improving living conditions. Implementing comprehensive health and well-being programs, including physical and mental health initiatives, will ensure residents have the support they need for a

healthy lifestyle. Finally, offering financial literacy programs and economic support services can empower residents with the knowledge and resources to achieve greater financial stability, further contributing to their overall well-being and independence. These combined efforts are essential to addressing the current challenges and significantly improving the living standards in PHP communities.

Keywords: PHP Residential Environment, Quality of Life, CPTED, Malaysia

Introduction

Quality of life has, always, been an intricate phenomenon in the development of human history. Quality of residential environment has been played a major role in quality of life, affecting many aspects of society. Quality of residential environment has a direct and immediate impact on physical, and mental health, after all on quality of life (Bilal, Meera, & Abdul Razak, 2019). According to Wahi, Zin et al. (2018) mentioned that the quality of life of People's Housing Programme (PHP) residential are at a dire estate that impact the desired aspect of residents. Many residential settings failed to meet the demands of dwellers satisfaction due to a lack of understanding of the components of quality of life. The situation at low-cost housing area a bit weightier, such as low space requirements, lack of community facilities, high maintenance expenses, and poor construction and material quality in low-cost housing are (Kuala Lumpur Structure Plan 2020).

According to Malaysia Kini (2018), 58% of PHP homes in Kuala Lumpur have been red-flagged as being in high-risk areas for drug addiction. Drug addicts live in PHP flat apartments, theft, robbery, and burglary have become routine occurrences that has adverse ramifications on security, mental health and quality of life. Vagi et al. (2018) claimed that now it has become a burden rather than a gift in terms of cleanliness upkeep and organization of these buildings. Residents of a particular PHP site located in the Klang Valley region were confronted with unpleasant odors emanating from rubbish, a scarcity of parking spaces, and the persistent concern of burglaries on a regular basis. Moreover, the instances involving elevators accidents resulting in substantial harm or fatality necessitate prompt intervention from public safety authorities.

According to Mokhtar (2021) observed the major maintenance difficulties at PHP elevators were recorded, and eight people and a ten-year-old child survived a terrifying journey in a lift at Kuala Lumpur in Block C, PHP Kampung, Kerinchi People's Housing Program (PHP). Fortunately, the other lift passengers sustained shattered legs or ankles. The federal territories minister, widely known as Ku Nan, said he became upset when he sees the circumstances in government low-cost housing complexes, which are frequently described as dirty, crime-ridden, and in disrepair (Lee, Park, & Jung, 2016). Moreover, property crimes in Malaysia have more than tripled in low-income housing, and the frequency of residential burglaries and snatch thefts has grown, which is strongly tied to the criminals' ability to pick locks and outwit security systems (Srivarathan, Lund, Christensen, & Kristiansen, 2020). Furthermore, the PHP residents' behaviour, attitude, and experience are increasingly becoming negative as a result of constant rubbish odours, discarded unneeded furniture, exhaust, trash, and even urine bottles from above flat units. Something must be done to curb crime and violence among B40 PHP inhabitants. Although just 20.5% of Kuala Lumpur's population is low-income, many of them are still unable to afford a home due to the city's ever-increasing cost of living (Shuid,2004). Malaysian low-cost housing has not been

appealing to family housing demands, comfort, social, cultural, and religious concerns. It was stated that the majority of low-cost residences in Malaysia lacked recreational and community amenities, including amusement facilities such as adaptable lobbies and playgrounds (Haque et.al. 2019, Bhuiyan et.al. 2011, Zulkifli & Ismail, 2023 & Zailani, 2024).

Within the context of housing in Malaysia, the category of low-cost housing holds significant importance. Hence, the Malaysian government has implemented the fundamental notion of ensuring the provision of an appropriate dwelling for all its residents, emphasizing the necessity for these houses to possess superior standards in terms of essential amenities and architectural design. In addition, the housing environment must be of high quality while ensuring that the cost of housing remains within the financial means of the populace, particularly those with low income (Azman & Mohamed Harith, 2020). The Malaysian government launched People's Housing Programme (PHP) to address the issue of squatters and ensure that lower-income people had access to affordable housing rather it facing multidimensional issues such as security, lack of maintenance, lack of littering management, lack of recreational facilities etc. Thus, it has become obvious to manage these issues for developing quality of life in People's Housing Programme (PHP) area (Wahi et al., 2018).

The People's Housing Programme (PHP) residential area view as a mechanism for low-income people to own their homes and live in improved housing conditions by assuring the supply of minimum acceptable standards, amenities, and facilities within and outside the residence units (Marzbali, Abdullah, & Tilaki, 2019; Rajadurai, Ah, Zainol, & Azman, 2021). This will lead to an improvement in citizens' quality of life. The government is aggressively supporting programmes to guarantee that all individuals have access to high-quality, affordable housing. This incident highlights how the Malaysian housing industry is beginning to priorities sustainability (Wahi et al., 2018). Therefore, this study investigates the impact of the People's Housing Programme (PHP) residential environment on Crime Prevention Through Environmental Design (CPTED) and overall Quality of Life (QOL) in Malaysia.

Review of Literature

The concept of Quality of Life (QOL) is employed to describe the overall well-being and happiness of an individual or society in terms of their physical and mental health, rather than solely focusing on material wealth (Streimikiene, 2015). Several indicators can be used to assess the quality of life. The conventional indicators of quality of life encompass factors such as wealth and employment, education, the built environment, physical and mental health, leisure time, crime rate, and social cohesion. In research by (Fujii et al., 2013), as cited in (Bougouffa & Permana, 2018), it is found that the Quality Of Life (QOL) in Malaysia is decidedly anticipated by post-realist aspects (i.e., marriage, neighbors, kinship, everyday life, relaxation, and profound life). It is likewise decently by realist components (i.e., the way of life, work, family pay, lodging, wellbeing, and training). Thusly, quality of life is utilized to break down the prosperity of people and social orders societies.

According to Idris et al. (2016) recognized that the quality of life has been utilized to quantify practical advancement since it addresses the monetary, social, and environmental elements of feasible turn of events. On a commonsense premise, the quality of life of PHP residents has been examined and applied by past researchers. Rameli (2019) observed that both a couple are Malaysian residents, have laid out nuclear family, and their all-out pay for the husband

and spouse are under RM2500 for a minimal expense. Conversely, for low, and medium expenses, it is beneath RM3500. Other than that, the adolescent complex units accommodated single person's Malaysian residents under 40 years old with an income of not exactly RM 1500 every month, which falls under the last 40 (B40) class (Ishak, Yakub, & Achu, 2019).

A decent tenement component assumes a fundamental part in accomplishing a decent quality of life for the residents. Assessment of the lodging components of PHP residential environment is fundamental for the prosperity of the residents. There are many issues with the tenants in PHP residents. The residents who live openly lodging will generally feature their disappointment with natural lighting, space in the kitchen, clothesline, air dissemination, trash, commotion, public vehicle, and establishment of learning and medical care offices. Little or squeezed houses can influence the degree of solace and serenity of residents in their own homes. As per a review directed in the public lodging regions in Hangzhou, China, the review has stressed three critical parts in deciding the lodging fulfilment level of residents (Zheng et al., 2015). These huge parts that show areas of strength for a with the occupant's fulfillment are lodging highlights, house offices, and neighborhood qualities. Subsequently, the environmental factors and neighborhood really do influence the quality of life of PHP residents. Other than lodging highlights, local area association and social relationship are likewise connected to the quality of life (Ismail et al., 2015).

According to (Losindilo, Mussa, & Akarro, 2010) mentioned that affirmed that social inclusion among residents towards non-profit associations has connected to a superior quality of life. Residents associated with a noble cause and environmental mindfulness exercises will more often than not show solid social connections and local area exercises. Instruction is another aspect that contributes towards a superior quality of life. With training, the occupant's proficiency rate can improve, and higher enrolment rates in schools. Subsequently, the residents of PHP need to guarantee that their residents are given appropriate schooling. Besides, monetary education and employer stability are likewise used to gauge the quality of life. According to Haque and Zul (2016) observed that financially proficient individuals can pursue better monetary choices, so they are bound to accomplish their monetary objectives and ultimately add to the financial turn of events. Solid monetary security in their future life can increment freedom and monetary control, diminishes the weight on others, and works on their quality of life. Mohd et al. (2018) portrayed that the well-being of individuals residing in low-cost housing in Kuala Lumpur is significantly influenced by factors such as housing standards, individual units, and the surrounding neighbourhood circumstances. Despite the presence of a satisfactory level of satisfaction among PHP housing occupants, there are several significant factors that contribute to the overall quality of life within these residential units. These factors include issues related to natural lighting, limited and cramped living spaces, inadequate kitchen space, absence of clothesline facilities, insufficient air circulation, waste management, noise levels, safety and security measures, parking availability, accessibility to public. So the residential structure highlights, general environments, and neighborhood conditions affect the quality of life of PHP occupants residents (Hashim et al., 2012).

Besides Huang and Du (2015) found that housing highlights, house offices, and neighborhood characters have serious areas of strength for the occupant's fulfillment. Other than the

residential structure highlights, local area contribution, social belongingness, open air environment, experiential value, and perspectives connected with local area relations are equally connected to a great quality of life. Bilgili and Arpacı (2014) viewed that dynamic contribution among the occupants in the social association brings social union and is connected to a superior quality of life. Besides, occupants' contributions in cause and environmental activities help to get great experiential qualities and perspectives towards the inhabitants and the local area will in general show areas of strength for a relationship and local area activities. Aside from the above issues, quality instruction significantly affects the good quality of life since it assists with accomplishing a superior quality of life, close-to-home prosperity, and flexibility (Edgerton et al., 2012). Quality training has a crucial role in enhancing the quality of life for the citizens of PHP. Furthermore, the enhancement of financial literacy and the attainment of professional stability are regarded as significant factors contributing to the security and well-being of individuals. These aspects can lead to increased personal autonomy and reduced reliance on external support, thus improving overall quality of life

Methodology

The purpose of this research is to analyse how the effects of Peoples Housing Programme (PHP) on crime prevention through environmental design on residential environment on quality of life in Malaysia. The panel dataset is a source of primary data and it was surveyed by PHP B40 group in Malaysia. Total dataset is 450. The analysis will be based on primary survey data collected from B40 group residents of Kuala Lumpur, Johor and Penang in Malaysia. The survey questionnaire with the scale of 1-to-6-point Likert scale. The current study employs a quantitative research methodology that incorporates systematic empirical investigations with the use of statistical techniques to quantify data. This study used Statistical Package for Social Science (SPSS) version 3.0 and Smart Partial Least Squares (PLS).

Findings

Descriptives

Respondent Status on PHP Residential Environment

The status of PHP Residential Environment. The statements below are related to indicators of PPR Residential Environment. Please answer by circling the scale of 1 to 6 (1=strongly disagree, 2=Somewhat Disagree, 3= Disagree, 4=Agree, 5=somewhat agree, 6= strongly agree). In terms of data survey information, 87.2% of the respondents said that they are satisfied with the overall unit features of my PHPRE (e.g. number of rooms, room size, living hall space). whereas, 12.8% said it decreased. Moreover, the average comment of respondent status recorded from the survey data was 3.9977 respectively. Furthermore, 84.9% of the respondents said that they are satisfied with the public installations in this PHP (e.g. playground, surau, parking, public hall)., whereas 15.1% said it decreased. Moreover, the average comment of respondent status from the survey data was 3.9392 respectively.

Table 1
Distribution of PHP Residential Environment

PHP Residential Environment.										
Issues	Observation Scale						Average Value of Scale	SD	Proportion of low	Proportion of high
	1	2	3	4	5	6				
I am satisfied with the overall unit features of my PPR (e.g. number of room, room size, living hall space)	1.4	5.0	6.5	72.3	9.5	5.4	3.9977	0.83517	12.8	87.2
I am satisfied with the public installations in this PPR (e.g. playground, surau, parking, public hall)	1.8	6.1	7.2	70.3	10.6	4.1	3.9392	0.86225	15.1	84.9
I am satisfied with social environments provided in this PPR (e.g. community programme)	0.9	3.8	8.1	73.6	10.1	3.4	3.9842	0.7435	12.8	87.2
I am happy with clean environments in the surrounding of this PPR	2.3	8.6	14.2	62.8	9.2	2.9	3.7703	0.91952	25.0	75.0
I am happy with the availability of neighborhood facilities around my PPR (e.g. supermarket, school, banks)	0.5	3.6	4.3	76.1	10.6	5.0	4.0766	0.72585	8.3	91.7

Moreover, 87.2% of the respondents said that I am satisfied with social environments provided in this PPR (e.g. community programme), but 12.8% said it decreased. However, the average value of respondent status recorded from the survey data was 3.9842. Meanwhile, 75.0% of the respondents said that they are happy with clean environments in the surrounding of this PPR, whereas 25.0% said that it had decreased. Moreover, the average comment of respondent status recorded from the survey data was 3.7703 respectively. Lastly,

91.7% of the respondents said they are happy with the availability of neighborhood facilities around my PHP (e.g. supermarket, school, banks) but 8.3% said it decreased. However, the average value of respondent status recorded from the survey data was 4.0766 respectively.

Respondent Status on Status on Quality of Life

The status of Quality of life. The statements below are related to indicators of PPR Quality of life Please answer by circling the scale of 1 to 6 (1=strongly disagree, 2=Somewhat Disagree, 3= Disagree, 4=Agree, 5=somewhat agree, 6= strongly agree). In terms of data survey information, 90.3% of the respondents said that their PPR has strong Community Engagement. whereas, 9.7% said it decreased. Moreover, the average comment of respondent status recorded from the survey data was 4.1126 respectively.in additionally, 87.4% of the respondents said that they have a good mental health when I am staying in this PPR, whereas 12.6% said it decreased. Moreover, the average comment of respondent status from the survey data was 3.964 respectively. furthermore, 82.2% of the respondents said that they can access to good public transportation near my PPR area, whereas 17.8% said it decreased. Moreover, the average comment of respondent status from the survey data was 3.9617 respectively. 88.1% of the respondents said that they enjoy good surrounding environment of my PPR, whereas 11.9% said it decreased. Moreover, the average comment of respondent status from the survey data was 4.495 respectively.92.3% of the respondents said that they enjoy neighbourhood relationship in this PPR, whereas 7.7% said it decreased. Moreover, the average comment of respondent status from the survey data was 4.018 respectively.88.1% of the respondents said that they hang out with my neighbours in this PPR quite often, whereas 11.9% said it decreased. Moreover, the average comment of respondent status from the survey data was 4.0495 respectively.82.2% of the respondents said that they are satisfied with legitimate supports for my health activity in this PPR. whereas, 17.8% said it decreased. Moreover, the average comment of respondent status from the survey data was 3.9032 respectively.

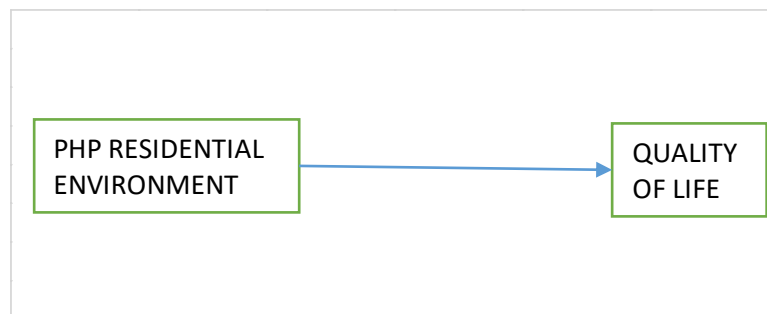
Table 2
Distribution of Quality of life

Quality of life										
Issues	Observation Scale						Average Value of Scale	SD	Proportion of low	Proportion of high
	1	2	3	4	5	6				
I am having a good house to stay in this PPR	0.7	3.2	5.9	71.4	12.4	6.5	4.1126	0.78698	9.7	90.3
I have a good mental health when I am staying in this PPR	2.3	3.8	6.5	74.3	8.8	4.3	3.964	0.82487	12.6	87.4
I can access to good public transportation near my PPR area	2.7	4.7	10.4	63.7	12.8	5.6	3.9617	0.94349	17.8	82.2
I enjoy good surrounding environment of my PPR	1.1	3.4	7.4	73.0	10.8	4.3	4.018	0.76883	11.9	88.1
I enjoy neighbourhood relationship in this PPR	0.5	2.7	4.5	75.2	11.9	5.2	4.1104	0.71361	7.7	92.3
I hang out with my neighbours in this PPR quite often	0.5	2.7	8.8	72.5	10.6	5.0	4.0495	0.73437	11.9	88.1
I am satisfied with my personal safety while staying in this PPR	2.3	4.7	10.8	68.9	9.2	4.1	3.9032	0.86418	17.8	82.2
I enjoy the diversification of ethnicity in this PPR	0.9	2.7	4.5	80.4	7.0	4.5	4.0338	0.69583	8.1	91.9
I have good food to eat	0.2	5.0	7.9	73.9	7.9	5.2	3.9977	0.76462	13.1	86.9
I have sound economic activities near my PPR	1.4	4.3	6.5	71.8	9.9	6.1	4.0293	0.83736	12.2	87.8
I am satisfied with legitimate supports for my health activity in this PPR	1.8	5.4	10.6	69.1	9.0	4.1	3.9032	0.85367	17.8	82.2
I enjoy the community development programme created in this PPR	0.7	3.8	9.2	72.7	8.6	5.0	3.9955	0.76903	13.7	86.3
I have sufficient saving for future	4.3	7.2	20.9	55.4	10.6	1.6	3.6554	0.96704	32.4	67.6

Moreover, 91.9% of the respondents said that I enjoy the diversification of ethnicity in this PPR, but 8.1% said it decreased. However, the average value of respondent status recorded from the survey data was 4.0338 respectively.

On the other hand, 86.9% of the respondents said that they have good food to eat. whereas, 13.1% said it decreased. Moreover, the average comment of respondent status from the survey data was 3.9977 respectively. While, 87.8% of the respondents said that they have sound economic activities near my PPR. whereas, 12.2% said it decreased. Moreover, the average comment of respondent status from the survey data was 4.0293 respectively. Moreover, 82.2% of the respondents said that they are satisfied with legitimate supports for my health activity in this PPR, but 17.8% said it decreased. However, the average value of respondent status recorded from the survey data was 3.9032 respectively. Meanwhile, 86.3% of the respondents said that I enjoy the community development programme created in this PPR. whereas 13.7% said that it had decreased. Moreover, the average comment of respondent status recorded from the survey data was 3.9955 respectively. Lastly, 67.6% of the respondents said that PPR, Community interaction helps reduce fear of crime., but 32.4% said it decreased. However, the average value of respondent status recorded from the survey data was 3.6554 respectively.

Structural Equation Model



Research Frame Work

Construct Reliability of the Model

As the present study aims to justified the effects of Peoples Housing Programme (PHP) on crime prevention through environmental design on residential environment on quality of life in Malaysia. The present study used structural equation model by the used of PLS path model analysis. The study used Smart PLS software to analysis of Result of PLS algorithm calculation with independent variables, dependent variable, relationship among variables, and all indicators of variables. In case of composite reliability, the table: 3 distribute the reliability of the model, the present good reliability based on the value of Cronbach’s alpha which has indicated that high consistency of research instruments being used in this study, whereas all the dimension especially for, PHP residential environment and Quality of life are highly reliable whereas the value of Cronbach’s alpha is higher than 0.7 respectively.

Table: 3
Distribute the Construct Reliability of The Model

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
PHPRE	0.781	0.784	0.860	0.606
QOL	0.835	0.836	0.879	0.547

Source: Primary Data from Survey

However, the study also found that there is significant composite reliability of all the reflective constructs are above 0.7 threshold value which has demonstrated high levels of internal consistency reliability for all reflective constructs. Moreover, Average Variance Extracted (AVE) also reflects based the values for all reflective constructs which are more than 0.5 measures the means of reflection of high validity level of convergent in this study accordingly.

Discriminant Validity of the Model

The table 4 shows the discriminant validity the based on the Fornell-Larcker criterion and the cross loadings are checked for discriminant validity. According to the Fornell-Larcker criterion, the square root of the AVE of each construct should be higher than the construct's highest correlation with any other construct in the model. The present study was checked of the cross loadings for discriminant validity and it was found that all data compiled the criteria accordingly.

Table:4
The Distribute of Fornell-Larcker Criterion

	CPTED	PHPRE	QOL
PHPRE	0.569	0.778	
QOL	0.510	0.670	0.740

Source: Primary Data from Survey

Collinearity Statistics (VIF) of the Model

The table 5 distribute the Collinearity Statistics (VIF) score of the model, the Collinearity issue of the constructs was assessed by validating VIF values which should be less than 5. The study result indicated that there is no Collinearity happened in this analysis of the model accordingly.

Table: 5
Distribute the Collinearity Statistics (VIF) of the Model

	VIF
PHPRE -> QOL	1.478

Source: Primary Data from Survey

Path Co-Efficient of the Model

The path coefficients represent the relationships between the constructs for structural model, where are the R2 values of the endogenous constructs are indicate relationship between variables and acceptance and rejections hypothesis of the study accordingly. the path coefficients measure the values (in between +1 to -1) whereas the values close to +1 is represent significant positive relationship vice versa if a value near 0 represents non-significant relationship among variables. There are Bootstrapping procedure which has represent of the level of significance of path coefficient values. It provides empirical t statistics' and 'P values' which are required to conclude of the confidence level of the relationship of the variables. Generally, the t value is compared with critical value to look if it is greater than critical value which is desired. The critical t values are 1.478,1.000, and 1.478 for a significance level of 1%, 5%, and 10%, respectively. However, the present study shown

that the Coefficient explain to PHP residents' quality of life whereas T Statistics also 3.250 at the level of P Values 0.001 respectively.

Table:6

Distribute the Relevance and Significance of Path Co-Efficient of the Model

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
PHPRE -> QOL	0.561	0.561	0.056	10.017	0.000

Source: Primary Data from Survey

Conclusion

The study explored the impact of the People's Housing Programme (PHP) residential environment on Crime Prevention Through Environmental Design (CPTED) and the overall Quality of Life (QOL) in Malaysia. PHP, a governmental initiative, was introduced to provide affordable housing to low- and moderate-income individuals, aiming to enhance their quality of life by offering a secure and affordable residential environment. The study's findings revealed that while the PHP has made positive contributions, particularly in enhancing the security and well-being of its residents, it also faces several significant challenges that need to be addressed to improve the overall quality of life for its inhabitants. The study concluded that the PHP residential environment has a partial but positive effect on CPTED and the overall QOL of its residents. The PHP's primary objective was to alleviate the housing affordability issues faced by low-income individuals in Malaysia. Through the provision of affordable and secure housing, the PHP has indeed improved the overall well-being of its residents. However, the study also highlighted several areas of concern that need attention to fully realize the program's potential in enhancing residents' quality of life. One of the key findings is the significant positive relationship between the PHP residential environment and CPTED. This relationship indicates that the design and structure of the residential environment play a crucial role in crime prevention, which in turn contributes to the residents' sense of security and overall quality of life. However, the study also identified various drawbacks, including physical and mental health issues, perceived safety concerns, and challenges related to social relationships and community development within PHP residential areas.

Despite the positive impact on crime prevention and quality of life, the PHP faces challenges related to the maintenance of the residential environment, the adequacy of public facilities, and the overall living conditions. Issues such as poor maintenance, lack of cleanliness, and inadequate recreational facilities were identified as significant concerns among PHP residents. Additionally, the study noted that the social environment, including community engagement and relationships among residents, requires further improvement to foster a stronger sense of community and well-being. Based on the findings, the study provides several recommendations aimed at addressing the identified challenges and further enhancing the quality of life for PHP residents; Strengthen CPTED strategies within PHP residential areas to address safety concerns and reduce crime rates. This includes improving lighting, surveillance, and access control within residential complexes, which would contribute to residents' sense of security and overall mental well-being. Promote community engagement and social relationships through organized programs and activities that foster a sense of belonging and cooperation among residents. This could include community events,

educational workshops, and social gatherings aimed at building stronger social ties and improving overall community cohesion. Upgrade the physical infrastructure and amenities within PHP areas to address issues related to living conditions, including cleanliness, maintenance, and accessibility of public facilities. This could involve regular maintenance schedules, improved waste management systems, and the provision of adequate recreational spaces for residents. Implement health promotion initiatives targeting both physical and mental health, ensuring residents have access to necessary resources and support systems to maintain a healthy lifestyle. This could include regular health check-ups, fitness programs, and mental health counseling services. Provide financial literacy programs and economic support services to PHP residents to improve their financial stability. This could involve offering workshops on budgeting, saving, and investment, as well as providing access to microfinance options to help residents achieve greater financial independence. These recommendations aim to build on the positive aspects of the PHP while addressing its shortcomings, ultimately leading to an improved quality of life for its residents. By focusing on safety, community development, infrastructure improvement, health, and economic support, the PHP can better fulfill its mission of providing affordable and secure housing that truly enhances the lives of low-income individuals in Malaysia.

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References

- Bhuiyan, A. B., Siwar, C., Ismail, A. G., & Talib, B. (2011). Financial sustainability & outreach of MFIs: A comparative study of aim in Malaysia and RDS of Islami Bank Bangladesh. *Australian Journal of Basic and Applied Sciences*, 5(9), 610-619.
- Bilal, M., Meera, A. K. M., & Abdul Razak, D. (2019). Issues and challenges in contemporary affordable public housing schemes in Malaysia: Developing an alternative model. *International Journal of Housing Markets and Analysis*, 12(6), 1004-1027.
- Bilgili, N., & Arpacı, F. (2014). Quality of life of older adults in Turkey. *Archives of gerontology and geriatrics*, 59(2), 415-421.
- Bougouffa, I., & Permana, A. S. (2018). A study on the linkages between residential satisfaction and the overall quality of life in Bandar Tun Razak Area of Kuala Lumpur City, Malaysia. *Applied Research in Quality of Life*, 13(4), 991-1013.
- Edgerton, J. D., Roberts, L. W., & von Below, S. (2012). Education and quality of life. *Handbook of social indicators and quality of life research*, 265-296.
- Fujii, M., Inoguchi, T., Batchuluun, B., Sugiyama, N., Kobayashi, K., Sonoda, N., & Takayanagi, R. (2013). CTLA-4Ig immunotherapy of obesity-induced insulin resistance by manipulation of macrophage polarization in adipose tissues. *Biochemical and biophysical research communications*, 438(1), 103-109.
- Haque, T., Siwar, C., Bhuiyan, A. B., & Joarder, M. H. R. (2019). Contributions of Amanah Ikhtiar Malaysia (AIM) microfinance to Economic Empowerment (EE) of women borrowers in Malaysia. *Economics & Sociology*, 12(4), 241-333.

- 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.
- Huang, Z., & Du, X. (2015). Assessment and determinants of residential satisfaction with public housing in Hangzhou, China. *Habitat international*, 47, 218-230.
- Idris, K., Mohamed Shaffril, H. A., Md. Yassin, S., Abu Samah, A., Hamzah, A., & Abu Samah, B. (2016). Quality of life in rural communities: Residents living near to Tembeling, Pahang and Muar Rivers, Malaysia. *PloS one*, 11(3), e0150741.
- Ismail, F., Jabar, I. L., Janipha, N. A. I., & Razali, R. (2015). Measuring the quality of life in low cost residential environment. *Procedia-Social and Behavioral Sciences*, 168, 270-279.
- Lee, J. S., Park, S., & Jung, S. (2016). Effect of crime prevention through environmental design (CPTED) measures on active living and fear of crime. *Sustainability*, 8(9), 872.
- Losindilo, E., Mussa, A., & Akarro, R. (2010). Some factors that hinder women participation in social, political and economic activities in Tanzania. *Arts and Social Sciences Journal*, 4(1), 1-10.
- Marzbali, M. H., Abdullah, A., & Tilaki, M. J. M. (2019). 8 Crime Prevention Through Environmental Design (CPTED) in Malaysia. *Rebuilding Crime Prevention Through Environmental Design: Strengthening the Links with Crime Science*, 153.
- Mohd, T., Saraf, M. H. M., Pin, S. F. C., & Hasbullah, M. N. (2018). Designing the Invention House Assessment Form for Kuala Krai, Malaysia. *Asian Journal of Quality of Life*, 3(11), 47-57.
- Mokhtar, M. (2021). How safe are the lifts in people's housing projects (PPR)? How many of them are there in Kuala Lumpur? Throughout Malaysia? Are they regularly maintained? <https://www.mariammokhtar.com/how-safe-are-the-lifts-in-peoples-housing-projects-ppr-how-many-of-them-are-there-in-kuala-lumpur-throughout-malaysia-are-they-regularly-maintained/>. people housing programme at PPR melana indah (fasa 1), Johor Bahru. *Journal of Administrative Science*, 17(2), 92-108.
- Rajadurai, S., Ah, S. H. B. A. B., Zainol, R. B., & Azman, Z. B. (2021). Crime prevention through environmental design and its challenges in reducing crime: a case of Selangor, Malaysia. *Security Journal*, 1-14.
- Rameli, N. (2019). Housing programmes and urbanization: A comprehensive literature. *Journal of Techno-Social*, 11(2), 17-23.
- Srivarathan, A., Lund, R., Christensen, U., & Kristiansen, M. (2020). Social relations, community engagement and potentials: a qualitative study exploring resident engagement in a community-based health promotion intervention in a deprived social housing area. *International Journal of Environmental Research and Public Health*, 17(7), 2341.
- Streimikiene, D. (2015). Quality of life and housing. *International Journal of Information and Education Technology*, 5(2), 140.
- Vagi, K. J., Stevens, M. R., Simon, T. R., Basile, K. C., Carter, S. P., & Carter, S. L. (2018). Crime Prevention Through Environmental Design (CPTED) characteristics associated with violence and safety in middle schools. *Journal of school health*, 88(4), 296-305.
- Wahi, N., Zin, R. M., Munikanan, V., Mohamad, I., & Junaini, S. (2018). *Problems and Issues of High Rise Low Cost Housing in Malaysia*. Paper presented at the IOP Conference Series: Materials Science and Engineering.

- Zailani, M. N., Satar, N. H. M., Zakaria, R. H., & Rasiah, R. (2024). The Multidimensional Poverty Characteristics of The Poor And Destitute Asnaf In Kuala Lumpur. *International Journal of Business and Society*, 25, 91-112.
- Zheng, S., Jayasumana, S., Romera-Paredes, B., Vineet, V., Su, Z., Du, D., . . . Torr, P. H. (2015). *Conditional random fields as recurrent neural networks*. Paper presented at the Proceedings of the IEEE international conference on computer vision.
- Zulkifli, F., & Ismail, H. (2023). Factors influencing house buyer's decision in Malaysia. Case study: Sepang, Selangor. *Planning Malaysia*, 21.