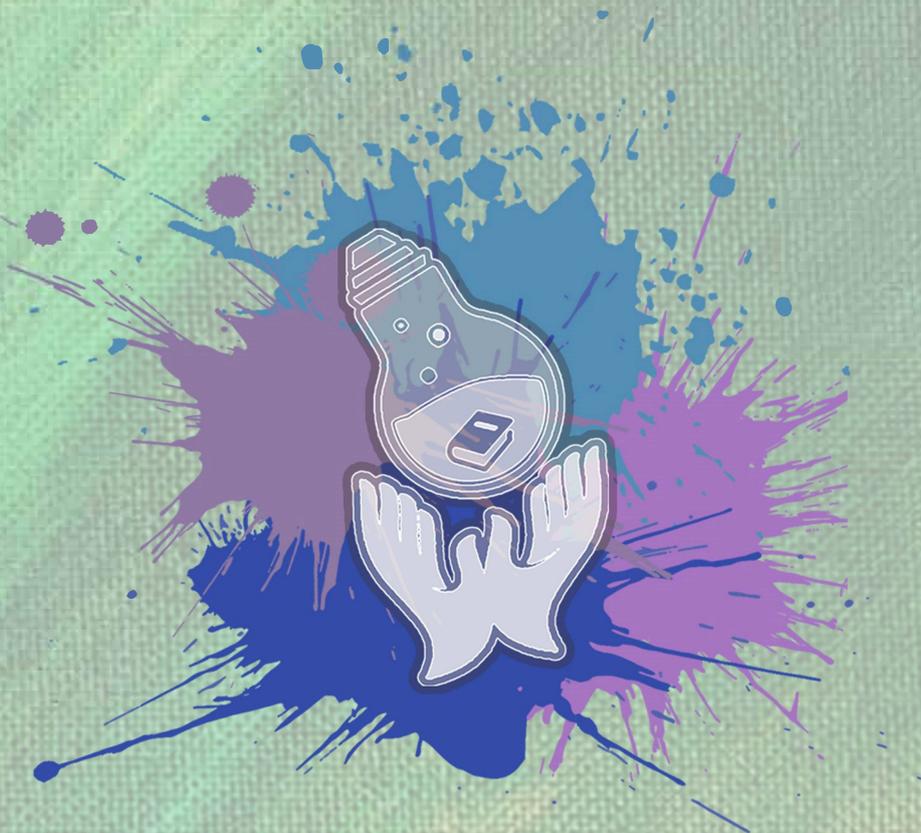




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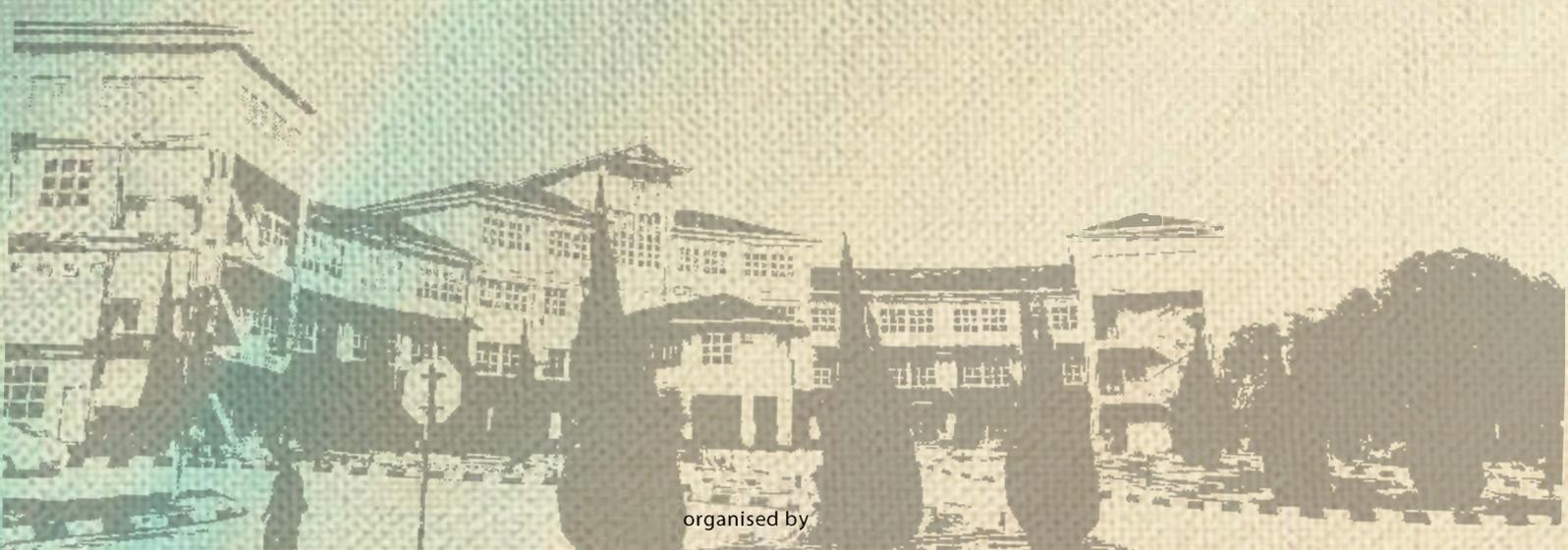


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SERI ISKANDAR CAMPUS

THE FACTORS AFFECTING THE LEVEL OF COMFORT AMONG LOW COST HOUSING OCCUPANTS

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Abstract:

Low cost housing construction in Malaysia encountered many problems in terms of ensuring comfortability of the occupants. Lack of comfort adversely affects the social quality rate of low cost housing developments. Review of previous literature proves that the factors affecting the level of comfort among low cost housing occupants consist of physical and non-physical elements. This research identifies the factors affecting the level of comfort among the low cost housing occupants; and ranks the factors most affecting the level of comfort among low cost housing occupants. Interpretation of the analysis and findings uses descriptive analysis and frequency methods. The design of the questionnaire is in a nominal and six-point Likert Scale type aimed at finding the factors most affecting the level of comfort among low cost housing occupants. The results from this research arise from a survey made on low cost housing occupants in the Town of Seri Iskandar specifically in Taman Maju, Taman Iskandar Perdana, and Bandar Universiti. The findings indicate that the factor that mostly affects the occupants' level of comfort is the adequacy of space where most of the respondents agree that it vastly affects their comfort while living in low cost housing areas.

Keywords:

Housing; Low Cost Housing; Comfortability Factors; Level of Comfort; Low Cost Housing Occupants

1.0 INTRODUCTION

Due to modernisation, development, and the upsurge of population in this country, the demand for housing is increasing aggressively. Unfortunately, the purchasing power of the population do not commensurate with the demand and needs for the housing schemes developed. Consequently, the need for low cost housing keeps increasing in number. Each house should provide comfort to the occupants; regardless it is low cost, medium cost or any type of house. A house is a place where one finds shelter, relaxation, safety, and personal freedom (Adebayo & Seow, 2013). The occupants should feel comfortable living in the house. The question now is that do all the low cost houses built in Malaysia provide comfort to the occupants? Past research merging all factors that may affect comfort including predominant factors of social and economic aspects and various environmental parameters are still inadequate to help future researchers find support statements in the comfort factors of occupants in low cost housing. These include, among others research by Shuid (2010), Idrus and Ho (2008), Sufian and Mohamad (2009), Ismail, Mohidin, and Daud (2017), and Sulaiman, Baldry and Ruddock (2014). This paper identifies the factors affecting the level of comfort among low cost housing occupants in the Town of Seri Iskandar, Perak; and ranks them by order of factors most affecting the level of comfort to the factors least affecting the level of comfort.

2.0 LITERATURE REVIEW

Sulaiman et al. (2014) quote Paragraph 60 of the Habitat Agenda (United Nations, 1996) that defined the word 'house' from the occupant's standpoint and that 'adequate shelter' means more than just a roof over one's head. It infers sufficient amount of privacy, space, personal interfaces, and security, all of which should be available at an affordable cost. Sufficiency is the dominant factor while giving allowance for improvisations subject upon specific cultural, social, environmental and economic factors.

2.1 Low Cost Housing

The Merriam-Webster Dictionary (2018) defines 'low income housing' as housing for people with low income. However, in Malaysia the term used is 'low-cost housing'. The Fourth Malaysia Plan (1981-1985) introduced 'low-cost housing' to mean housing with four (4) distinct characteristics namely; priced not exceeding RM25,000 per unit, and targeted for applicants with household incomes of not exceeding RM750. These housing may comprise flats, single-storey terrace or detached houses, and their design must comply with a minimum standard: built-up area of 550-600 square feet, two bedrooms, a living room, a kitchen and a bathroom-cum-toilet. The main objective was to ensure every Malaysian is able to own a house. In line with changes in the economic make-up of the country, the Malaysian Government reviewed the suitability of low-cost housing and introduced a new category of 'low medium-cost housing' under the Seventh Malaysia Plan (1996 – 2001). These are houses priced from RM42,000 to RM60,000 per unit and aimed for people with household incomes of RM2,500 or below (Sulaiman et al., 2014).

Ismail et al. (2017) iterate that the Government reserves low-cost houses for the B40 household groups (bottom 40% of the total Malaysian population). However, the comfortability of low-cost housing occupants is compromised as low-cost houses are built on a small budget (Ismail et al., 2017), on low-priced lands, and conform to the minimum requirements of the Construction Industry Standard (CIS). The production of low-cost houses is merely as property-owning commodities. The usual low-cost housing unit has inadequate space suitable for only necessary interfaces to enable human survival.

2.2 Comfort Factors

The focus of this research is mainly to identify the factors that relate with the occupants' comfort level in low cost housing scheme. The research finds that comfort factors are wide-ranging including physical elements and non-physical elements that comprise corporeal, social and environmental factors. Comfort is a physical human condition, a feeling of contentment or a sense of well-being felt by a person comprising many variables bearing on housing comfort such as housing, neighbourhood, and user characteristics. Physical features of the house itself notably the number of bedrooms; the size and location of kitchen in relation to the house orientation, as well as the design and quality of the house greatly affect housing comfort (Adebayo and Seow, 2013). Besides that, community comfort including availability of neighbourhood facilities such as schools, clinics, shops and community halls relates strongly with housing comfort. Lack of comfort has many implications to it, which includes health and safety problems, truancy at home, leading to criminal inclinations, or result in low worker productivity and morale. Insufficient space, indoor environmental qualities, environmental facilities, affordability of the houses and accessibility to social facilities are part of the major underwriting factors to lack in comfort which can have adverse effects on the quality of life (Adebayo and Seow, 2013). Ismail et al. (2017) find that poor design leads to low-cost house occupants' stress. Comfort is therefore a condition where physiological factors affect the psychological make-up of the occupants (Boduch and Fincher, 2009).

3.0 METHODOLOGY

This research uses the quantitative method in the form of Statistical Package for the Social Sciences (SPSS) software for data analysis and findings. Data collection is through primary and secondary methods. Primary data collection is through questionnaire survey comprising of 120 sets of questions distributed with 91.5% of return percentage due to incomplete and non-returnable sets. The author could not undertake a pilot study due to the time limitation. This questionnaire is concerning the research topic aimed at achieving the research objectives. In order to complete the second objective of the study, the researcher has implemented a six-point Likert scale questionnaire survey.

4.0 ANALYSIS AND FINDINGS

The return questionnaires are analysed using the SPSS software to derive the research findings. Data analysis stage employs various distinguishing means related with the objectives of this study. Figure 1 depicts the respondent distribution in the case study areas of Taman Maju, Taman Iskandar Perdana and Bandar Universiti.

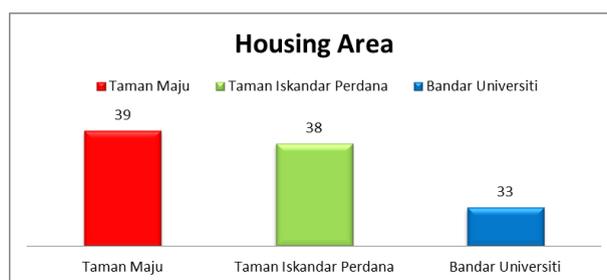


Figure 1: Distribution of respondents according to their housing area

Table 1 below indicates three (3) physical and non-physical factors with noticeable differences in respondents’ agreement; which are 1. Adequacy of space; 2. Level of safety in the neighbourhood area during the night; and 3. Accessibility to city centre. The mean values ranked show the importance of adequacy of space to the respondents at 5.19; level of night time neighbourhood safety ranked second at 5.15 and accessibility to city centre ranked third at 5.10. In terms of physical comfort factors, sizes and location of accommodations; internal and external design; thermal comfort and ventilation, fared below adequacy of space.

Table 1: Descriptive statistics on the rank of factors

FACTOR	FACTOR CLASSIFICATIONS	MEAN VALUE	RANKING
Adequacy of space	Physical	5.19	1
The level of safety in the neighbourhood area during the night time	Environmental	5.15	2
Accessibility to city centre	Social	5.10	3

5.0 CONCLUSION

In concluding the research, the majority of respondents strongly agreed that the factor most affecting their level of comfort while living in a low-cost housing area is the adequacy of space. Adequacy of space influences oxygen sufficiency, which has direct relationship with the level of stress experienced by low-cost housing occupants. This finding concurs with a fair number of past research. Future low-cost housing developments will be able to use the findings of this research to further improve the quality of low-cost housing that will in turn improve the quality of life of the occupants

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