Correlation Analysis of Occupants’ Satisfaction and Safety Performance Level in Low Cost Housing

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Abstract

The general building conditions in low cost housing are part of human’s quality indicator. However, there are rising issues on the safety performance of the housing since the occupants are inclined to perceive safety hazards. Therefore, this paper explores the concept of Post Occupancy Evaluation (POE) as safety performance tool. This research conducted a survey on safety performance and occupants’ satisfaction to 24 numbers of low cost housing at Kuala Lumpur, Malaysia. The correlation result shows that safety performance has a significant relationship with occupants’ satisfaction. The findings supported the application of POE as the tool for safety performance.

1. Introduction

Housing is a foremost universal concern as the wellbeing of a country reflects in its people enjoying a particular standard of living. Residential and neighbourhood satisfactions are important indicators of housing quality and condition which affect individuals’ quality of life (Idrus & Ho, 2008). The factors, which determine their satisfaction levels, are essential inputs in monitoring the success of housing policies. Malaysia is going through a rapid process of population growth and urbanization for several
years now. As announced through the Seventh Malaysia’s Plan (1996-2000) to Ninth Malaysia’s Plan (2006-2010), there is the emergence in low-cost housing construction which is an intentional act as an approach to eradicate squatters or illegal residential, especially in the Klang Valley area. It is inevitable that the Government encourages cooperative housing not only for the lower income groups, but it also caters for the middle-low income groups. Seeing the wavering economic situation, the emerging problem in housing property is the growing demand for better and safe housing. Therefore, it is increasingly important to evaluate housing property for many reasons.

Goh and Ahmad (2012) accentuated that the Human Rights Commission of Malaysia in 2003 criticised the Malaysian government on the failure in addressing issues that relate to the physical safety of occupants. There are also other issues, which were not in-depth consideration such as the habitability, suitability, lack of maintenance, defects and shoddy workmanship in low cost housings. It needs to be set forth that poor quality of a building is much allied to the safety failures of building. This assertion is supported by Abdul-Rahman et al., (1999) and Yau (2006) that indefensible buildings with poor workmanship and low quality of materials also lead to building deterioration and poor aesthetical performance. Poor quality and workmanship of a building will worsen the building if it is left unattended and the absence of maintenance action will instigate further impairment (Husin et al., 2012). As a result, the building is considered as unsafe due to the inferior quality condition. Despite enforcement of Construction Industry Standard 1 (CIS1, 1998) and Construction Industry Standard 2 (CIS2, 1998), regulatory measures, there are still many safety problems faced by low cost occupants in Malaysia.

Stevenson & Leaman (2010) suggested that the evaluation of user perceptions and behaviour in relation to building performance in housing is an emerging research area. The review of literature by Yau (2006) suggested that studies on housing safety should focus on the epidemiological relationship between the living built environment and safety hazards. Therefore, the assessment of safety in low-cost housing is highly relates to the users’ behaviour and occupants’ feedback. The present research acknowledges Post Occupancy Evaluation (POE) as the best tool to examine the safety performance in low cost housing. Many previous researches (Khalil & Nawawi, 2008; Mumovic et al. 2009; Hassanain, 2007; Liu, 2003; Minami, 2007; Altas & Ozsoy, 1998; Collet da Graca et al., 2007; Gill et al., 2010; Amaratunga & Baldry, 1999; Foxall & Hackett, 1994; Goh & Ahmad, 2012) have showed significant results in optimizing the performance of building by applying POE as the research tool.

2. Post Occupancy Evaluation (POE) as safety performance tool

Leaman et al. (2010) described that buildings are self-evidently settings or ‘contexts’ for human activities. The importance of safety performance assessment in Malaysian low cost housing is typically the criteria for judgement in the fulfilment of the functional and the occupants’ needs. Aply, the impact of strategies in dealing with the safety issues based on the building occupants’ experiences needs to be measured. Such assessment is reliable by adopting Post Occupancy Evaluation (POE) as the approach and the best tool to assess safety performance in low cost housing. POE has emerged as a strategic performance measurement tool that is able to examine building performance after the building handed over to the occupants. Regrettably, Way & Bordass (2005) identified that the post-construction stage of a building is the most neglected stage, and it is often looked upon as a nuisance and a distraction. POE encompasses a comprehensive review of the building details covering the technical performance, users’ satisfactions, project delivery process and recommendation for the action.

Many agencies, especially in developed countries such as the UK, USA, Canada and Australia, are using information from POE in support of the design criteria and guidelines. POE programmes were conducted after construction stage to identify mistakes and lessons learned by analysis of findings. To ensure the success of building performance aspects, the roles and responsibilities of building stakeholders
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